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DR. HANNA'S LIFE OF CHRIST.*

1. *The Earlier Years of our Lord's Life on Earth.* 2d Ed. 1868.
2. *The Ministry in Galilee.* 2d Edition. 1869.
3. *The Close of the Ministry.* 1869.
4. *The Passion Week.* 1866.
5. *The Last Day of our Lord's Passion.* 17th Edition. 1868.
6. *The Forty Days after our Lord's Resurrection.* 5th Ed. 1868.

"I WOULD rather," said one of the noblest men who have taught Ethics from a University chair to his generation, "I would rather be the author of a brief series of expositions of the life of Christ, executed after the idea of Lord Bacon's *First Flowings of the Scripture*, so as to help my fellow-men to understand that life better, than be the author of the grandest system of speculative ethics." The volumes before us go far to realize this aspiration. Their pre-eminent aim is to unfold the Sacred Individuality of Christ, in its unique glory,

as that is seen in the successive incidents of his human life. They show, without parade, the results of much meditation on problems not directly stated, with an insight that is rarely delicate as to the great Character they strive to delineate. Fragments of apologetical evidence are thus inwoven into the course of the narrative, and some deep soundings of moral evidence are taken in a very simple manner, while the lectures contain hints of some ulterior questions touching the very essence and genius of the Christian faith. Though enriched by contributions from several foreign fields, they are a genuine product of British soil, and will appeal peculiarly to the British type of mind.

Six years ago Dr. Hanna offered to the public the first volume of this series, selecting "the last day of our Lord's Passion" as his special theme. His aim in that volume was to construct "a continuous and expanded narrative, intended to bring out, as vividly as possi-

* THE LIFE OF OUR LORD. By Rev. WILLIAM HANNA, D.D., LL.D. 6 vols. foolscap 8vo. Edin.
NEW SERIES—VOL. X. No. 5

ble, not only the sequence of the incidents, but the characters, motives, and feelings of the different actors and spectators in the events described, refraining from all critical or doctrinal discussions." In the following year, the author issued a companion volume on "the forty days after the Resurrection." In its Preface he states that he "has long had the conviction that the results of that fuller and more exact interpretation of the books of the New Testament to which Biblical scholars have been conducted, might be made available for framing such a continuous narrative of the leading incidents in our Redeemer's life as would be profitable for practical and devotional rather than for doctrinal or controversial purposes." While that volume was passing through the press, the *Vie de Jesus* of M. Renan was published. Dr. Hanna makes a brief allusion to this work, and while expressing his desire that "a full and critical exposure of all its arbitrary assumptions and denials, affirmations without proofs, doubts without reasons, inconsistencies and contradictions, errors historical and exegetical," should be undertaken by some competent critic, he speaks of

"a simpler, more direct, and more effective method of dealing with the work by exposing the flagrant failure of its capital design and object—viz., to eliminate all that is supernatural and divine from the character and life of Christ, and yet leave him a man of such pure and exalted virtue, as to be worthy of the unreserved and unbounded love and reverence of mankind." "The singular result of this attempt to strip Christ of all divine qualities and properties is, that it mars and mutilates his character even as a man. Without any controversial treatment, the effect of M. Renan's work may be neutralized by a simple recital of the life of Jesus, so as to show that the blending of the natural with the miraculous, the human with the divine, is essential to the coherence and consistency of the record; that the fabric of the Gospel history is so constructed that if you take out of it the divinity of Jesus the whole edifice falls into ruins."

These sentences sufficiently explain the design of the two earlier volumes. The success which attended their publication* encouraged their author to

complete the series; and at intervals during the last four years he has issued one volume devoted to "the Earlier Years," one connected with "the Passion Week," and two relating to "the Public Ministry."

The idea which lies at the root of this latest effort to unfold and illustrate the life of Christ, is, that the facts recorded by the four evangelists are their own best witness-bearers, evidence, and defence; and that the record is historically inexplicable, if the divine element which the Church catholic has inferred from it be eliminated from the life of Jesus. In this respect there is a marked affinity between the work of Dr. Hanna and the treatise of Dr. Young, entitled, *The Christ of History*. Dr. Young starts with the presupposition that the records of the Gospels are but fragments of ancient history, in which we may expect to find all the characteristics of past literature transmitted to a modern age. He claims for them in the first instance no higher credit than that which criticism accords to the pages of Herodotus or Livy. But as he proceeds to examine the record of the four evangelists, he finds that they narrate the acts and words of One whose existence is utterly inexplicable as a product of the known forces that work in history and form human character, as they reveal a life from first to last ideally perfect; and as it is an axiomatic truth that like ever produces like, he infers that such a character could not have arisen out of the soil of humanity propagated from the past, but must have been a descent into that soil from above. We have come into contact with a life which historical processes cannot explain, and which cannot on any scientific principle be ranked in the common category of men. Its solitude, uniqueness, and completion force us to infer that it could not have sprung from a parentage that was incomplete, one-sided, and defective. To say that the loving adoration of the biographers and others transformed a really imperfect life into one ideally complete, is but to transfer the miracle from Christ to his followers. For, granting the perfection of the character that has

* The first volume of the series has been translated into the Dutch, French, and German lan-

guages, and republished in France and Germany by two of the leading Societies for the diffusion of Christian literature.

come down to us (whatever be the origin of the record, and the process of its transmission), its existence without a reality to give rise to it is much more inexplicable than is the reality itself. The poetic idealization by a band of disciples who should all agree as to details—illiterate men, sprung of a biassed, schismatic race, creating out of their own enthusiasm, with the most slender basis in fact, the only pattern of a life approaching to the measure of the stature of the perfect of which history makes mention, is much more difficult to account for than is the appearance of the ideal itself.

To a mind amenable to this and cognate processes of reasoning, Dr. Hanna's work will appear a valuable complement to Dr. Young's. In almost every page he will find corroboration of the line of argument. The evidence arising from the character and moral individuality of Christ, as the ideal of humanity made real, is the centre round which everything else revolves, and to which everything is made subservient. The outlying questions of religious criticism are passed over. We have no discussion as to the origin of the Gospel narratives. The vexed questions of date and authorship are not entered upon. The problem of the supernatural in its relation to natural law and order, the philosophy of the Christian faith as to the person of its Founder, the historical preparation for the Advent at the confluence of the several streams of Oriental and of western thought, the relation of Christ to the religious systems of the past and the existing sects of Judaism, are nowhere formally discussed. In short, all the *prolegomena* to a study of the life are subordinated to a simple recital of the life itself. The former inquiries are doubtless essential to a learned and scientific theology. Questions of philosophy and of history, in the words of Pressensé, "hold the approaches to the subject;" and we may even admit that everything depends upon the accuracy of our historical narrative, and upon the precise date of the documents which record it. But, on the other hand, if the main event recorded—the divinity of that human life—carries its own light within itself, it may indirectly prove the accuracy of the story. A distinct function is therefore

fulfilled by those who adopt the less ambitious method of portraying the Life in its divine sequences and harmonies, that it may be left to attest itself, and be its own evidence. We hold it possible for a wise and thoughtful mind, without the aid of a vast critical apparatus, and with nothing but the four Gospels in his hand, to arrive at a conclusion, *strictly philosophical*, as to the origin of Christianity and the claims of its Founder.

Historical study cannot solve the questions which the course of Church history has raised. Those who have gone most deeply into the problems of modern criticism are convinced that mere archaeological research cannot clear up any controversy touching the supernatural. Erudition is not needful for the determination of the main question at issue.* The critical questions are as to the authenticity of date and authorship, and the competency of the historians; as to when and by whom the books claiming an apostolic origin were written, and whether their authors were competent witness-bearers. To solve these questions we must proceed backwards up the stream of Time, studying century by century, examining the quotations of successive commentators and opponents, that we may be sure that the books have come down to us unimpaired. We have to pierce through the accumulated literary strata of eighteen centuries. Without much difficulty we can traverse fifteen of these. When we come, however, to the second, or even to the third century, we find the ground less firm, while the air grows gradually dim with mist. The further back we travel, our authorities are fewer and less trustworthy, less scientific, more given to gossip, less able to distinguish between fact and rumor. The age of the first two centuries of our era was one of manifold literary activity,

* On this point we have the testimony of Strauss himself. In the Preface to his *New Life of Jesus*, written for the German populace, he says, "It is a mere prejudice of caste to fancy that ability to comprehend these things belongs exclusively to the theologian or the man of learning. On the contrary, the essence of the matter is so simple that every one whose head and heart are in the right place [N. B.] may well rest assured that whatever, after due reflection and the proper use of accessible means, still remains incomprehensible to him, is in itself of very little value."—(Page viii. of Preface, Eng. Trans.)

but the majority of its records have perished, and its testimony is on the whole obscure. Hence the difficulty of reaching the solid ground of scientific certainty by the processes of historical criticism alone. We must satisfy ourselves that the writings of the early Fathers, which allude to the gradual formation of the canon, are themselves authentic; we must discover the qualifications which these writers possessed for forming a judgment on the matter in question, the range of their critical insight, their freedom from bias, their love of fact and reality, and their success in reaching it. This leads us into the domain of contemporary literature—to a comparison of the religious and the secular writers; into questions touching the philosophy, morality, the social state and customs of that age; and the very treatises accessible to the student of history are for the most part written in some special interest, and are the product of some foregone conclusion. But suppose our critical apparatus complete, and the historical inquiry ended, the very question which we had hoped to solve by history *returns* in all its magnitude, as a *problem of philosophy*. Therefore, since it must in any case remain for solution after the critical inquiry is closed, its study may validly precede any attempt thus to ascend the stream of history. In short, the function of historical criticism seems to lie in an intermediate region between the preliminary question of the supernatural (which is one of speculative philosophy) and the problem to which we must in any case return—the religious significance of the life of Christ (which is a philosophical inference from certain unique moral phenomena).

The idea of rewriting the Life of Jesus, already written in the Gospels, is a thoroughly modern conception. So long as the doctrinal conclusions of the Church as to the person of Christ were more valued than the facts of the sacred Biography itself, and so long as the work of our Lord overshadowed his life, anything approaching to a psychological analysis of his character and acts seemed an idle, if not an irreverent procedure. It is not too much to affirm that the divinity of our Lord for ages overshadowed his humanity, so as to cast it into the shade. But during the latter portion of the

eighteenth, and more particularly from the beginning of this century—mainly through the influence of Schleiermacher—the attention of theologians has been increasingly turned towards the human life, in its relations to the age in which it appeared, and the revolution which it has accomplished in the world. And it is only *in its humanity*, as a life exhibiting the signs of growth and progress, that a historical or biographic study is possible. Within the last hundred years, innumerable "Lives of our Lord" have been written by friend and by opponent; and it is singular that while in each case we must mainly revert to the four original recorders, alike for our materials and for the touchstone by which to try any new commentary or analysis, such is the hidden wealth of these four biographies, that it has been impossible for any one mind, or for any single generation, to exhaust their fulness, and, by drawing it fully forth, to supersede the need of future commentary. It is equally evident that the four biographers, being contemporaries of our Lord, and addressing a contemporary audience (while ignorant of the vexed controversies as to their record that would arise in the future), would necessarily take much for granted, would leave many gaps in their narrative, unimportant in themselves, but which would give room for future study and reverent conjecture. They present us, it is true, with more than a skeleton record, yet they leave much for the tact of a wise interpreter in collecting the fragments of their narrative, and illustrating their significance as a whole. The task of those who attempt this work anew is thus to transplant themselves to the apostolic age, and to re-state, in the light of their own time, the distinctive features of that "life which is the light of men." The very multiplication of these "lives of our Lord" has become an indirect testimony to the grandeur of the Original. Successive historians exhaust the life of an ordinary man, and future recensions of it become tedious, repetitive, and bald. For example, if we compare the two biographic sketches of the greatest Greek of the ancient world, the Socrates of Plato and of the Memorabilia, with the manifold attempts to write the Life of Christ, the contrast is arresting. Strauss has indeed asserted

that the picture of Socrates is the clearer of the two; and that a comparison of Xenophon and Plato with Matthew and John is unfavorable to the latter. Such an assertion is not surprising from one who has had the hardihood to affirm, that however consistent the testimony for the apostolic origin of the latter might be, he could put no faith in it, simply because it bears witness to the supernatural. But this much is self-evident,—that the world has not welcomed so many lives of Socrates as of Christ; and biographers have not attempted to write them, because, in the former case, they have not found the moral uniqueness, the many-sided and mysterious grandeur which has drawn successive interpreters to the latter. And we affirm with confidence that the issue of new lives of our Lord will never cease. Each future generation will be impelled by an inner *necessity* to travel backwards for itself along the stream of history to the fountain-head, carrying thither the burden of its perplexities for solution.

We have a guarantee, in the very nature of the case, that the biographers of our Lord would be more faithful to their original than the friends of Socrates were. Far from attempting to idealize their Master, they were from the first incapable of understanding his ideal greatness. Little as they understood him, they felt that they were in contact with a character far above themselves. Their adoration, though imperfect, would restrain them from putting into the lips of their Master what he did not really say, or recording what he did not really do. Exaggerate his greatness they could not; diminish it they dared not. But the fact that Plato, a philosophic thinker of equal calibre and greater comprehensiveness, was the recorder of the moral teaching of his predecessor (much of which he rejected and superseded)—instead of being, as Strauss asserts, a guarantee of impartiality and historical veracity, might easily lead the founder of the Academy into exaggerations to which the fishermen of Galilee were not exposed. It was of less consequence to Plato and to Platonism that the dialogues should exactly reproduce the oral teaching of Socrates, than it was to the disciples (who had no philosophy but that of their

Master), to draw a photographic portrait of his life.

We have alluded to the peculiar difficulty we encounter in ascending by the light of history to the apostolic age, from the dimness of some of the intervening links, from the breaks in the continuity of the stream. In addition to this, the very growth of theological opinions and creeds, the venerable edifice of systematic thought, and the endlessly divergent commentaries of churchmen, prevent us from seeing the first age with our own eyes as clearly as we would wish; and if they do not at times confuse our vision, they become at least "something between a hindrance and a help." But we are in reality much nearer the age of the apostles and of our Lord than we are to the two subsequent centuries, and much nearer (except in actual time) than were the critical inquirers of the third and fourth centuries. We can understand it better than we understand some of the periods of modern history. No age can measure itself. It must be subjected to the shifting scrutiny of the future before it becomes intelligible. And though we have lost some of the links in the process of transmission, the fact that Christianity, thus sifted and winnowed, now gives forth a clearer light as to its origin, while it holds its ground in the forefront of modern enlightenment, is an indirect testimony to the divinity of its birth. Subjected to the extreme rigor of critical analysis, the life of Jesus is surrounded with a new halo of glory: its significance is enhanced by the strain it has endured and the assaults it has resisted. And our remoteness in time, our distance from the apostolic age, enables us to compute the historical triumph of Christianity by the silently increasing monument which the Ages are building to its Founder. Remote from the apostles, we do not breathe the atmosphere of a time when the very haze of floating philosophies and vague aspirations, with the obscure origin of the new religion, might have hid its divinity from us; and while we do not rest the evidence of our faith upon a process of critical inquiry, the fact that the efforts of destructive criticism have continually failed in tracing Christianity to a natural source, is an accumulation of testimony

the other way, and reduces to a minimum the likelihood of any future discovery adverse to the faith of Christendom. The conclusion which we reach, independently of historical criticism, is not likely to be shaken by a series of puzzles which criticism itself is yearly diminishing.

There are other reasons which lead us to prefer the psychological to the critical study of the Gospels. When the merely critical instinct is predominant, it usually renders the mind as unfit for weighing moral evidence wisely, as the exclusively mathematical intellect is incompetent to deal with probable evidence. It sometimes checks the more sacred instinct of worship, and, sharpening one faculty, it blunts another. It may disqualify a man for duly appreciating some of the grander facts of history, of which the causes are hid, because they have their origin in the mystic region of personality. It may diminish reverence for what is obscure only because it is deep and fathomless, and may conceal the latent glory of those phenomena of human history which point upwards to the supernatural. The best antidote to this one-sidedness will be found in a devout study of the facts of our Lord's life on earth, in their sequences and harmonies, in the relation of the parts to the whole, and of the whole to the parts, in their origin, import, and final purpose. In these facts, theologians of the most opposite tendency, and who have reached very opposite conclusions as to detail, will find their common meeting-ground and rallying-point. The theory or doctrine of inspiration which they may chance to hold is of less consequence than their treatment of the facts which the inspired documents authenticate. And the theology that is by each successive system-builder derived from a fresh, patient, and earnest study of these facts, will be at once larger and deeper, more exact and more profound, than any that tradition can transmit or criticism construct. Theology becomes a series of wise inferences from the words and acts, from the scope and tendency, of our Lord's life; not a mere articulated skeleton formed by the juxtaposition of texts, but a living body of interdependent truths—in a word, *the interpreta-*

tion of fact. But to accomplish this many things are needed: the patient skill of an interpreter, "one among a thousand," who can appreciate the divinest elements in human life—the far glance of the religious seer—freedom from bias and preconception of what the life ought to be, or to accomplish—humility wedded to insight—intellectual integrity in alliance with the docile spirit that has learned its own ignorance—and, we must add, an appreciation of the world's need of light, as well as a readiness to welcome the supernatural ray.

A brief glance at some of the efforts to write a harmonious narrative of the life of our Lord may suffice to bring out the points of resemblance and contrast between them and this latest British work. We must confine ourselves to a few, excluding the commentaries and dissertations, however excellent. The bibliography of the subject is very fully given in the fourth edition of Hase's *Life of Jesus*.

In patristic times theologians merely sought to arrange the facts of the sacred biography in a harmonious order. Criticism was then unknown. The mediæval Church-commentary was tedious and fantastic, consisting chiefly of catenas from the Fathers; while the tendency to write legendary lives of the saints led some to add apocryphal stories to the narrative of the four Gospels. Not even at the time of the Reformation was the theological mind turned with any freedom to the human side of our Lord's life. It may even be said that the idea of a psychological explanation and study of it is foreign to the genius of all the Christian centuries till we come down to the last hundred years.

The *Great Exemplar* of our English bishop, Jeremy Taylor, however excellent in design and felicitous here and there in detail, is circumlocutory, diffuse, full of irrelevancies, and burdened with superfluous learning. It may be doubted whether any reader of that treatise ever reached a more enlarged and luminous view of our Lord's life as a whole by means of it. It is only just, however, to remember that the great English prelate speaks most humbly of his work, as but "an instrument and auxiliary to devotion." He was "weary," he tells us,

"and toiled with rowing up and down the sea of controversial questions," and therefore turned to that "which is wholly practical, and which makes us wiser, because it makes us better."

Shortly after the middle of last century, J. J. Hess of Zürich published an admirable biographic sketch, in which we recognize two noteworthy features. The value of the miraculous element in the Gospel histories he considers as entirely subservient to the moral results to be attained. As a mere display of power, apart from these results, it could have no inherent value. Hess was also one of the first to signalize the ideal *beauty* of our Lord's life, and the satisfaction it affords to the purest æsthetic sense, as one evidence of its origin. He was a careful, reverent compiler, and whenever a miracle can be explained as an acceleration of natural phenomena he abstains from supposing any other agency at work in the process.

In 1796, Herder published a treatise on the synoptics, and a sequel in the following year on the narrative of St. John. He concentrated his attention almost exclusively on the moral and spiritual aspects of the divine life, and their influence on humanity, striving also to harmonize the different records. The miraculous element he thought of little moment, incapable either of proof or of disproof by a later age. All the miracles that could (in his estimation) be explained by natural causes, such as the exorcism of evil spirits, the transfiguration, the phenomena attendant on the baptism, etc., he thus accounted for; others, such as the cure of the sick, the transformation of water into wine, and the resurrection of Lazarus, he explained as symbolical of the spiritual truth of Christ's influence over the lives of men. It is difficult to understand Herder's exact position in reference to this second class of miracles. Possibly it was not clear to his own mind. He seems to admit the reality of the resurrection, yet he attaches little value to its outward form. The spiritual and continuous miracle of moral resurrection which it symbolized is to him the main point in the narrative. Nevertheless he firmly maintained the divinity of the life of Christ.

Paulus, in his *Gospel Commentary*

and subsequent *Life of Jesus*, further develops the view of Herder, carrying it however to a one-sided extreme. A disciple of Spinoza and of Kant, he rejected entirely the idea of the miraculous as supernatural. He seems to regard it as a later addition to the original record of the text, appended by unwise interpreters. The evangelists he thinks make no assertion of supernatural power attending the works of Jesus; they rather hint that he employed natural means to effect his ends. He does not wish to explain away the reality of remarkable works (such as cures of the sick, etc.), but only to put these on an intelligible basis. For this purpose he endeavors to divest the recorded miracles of a certain clothing of opinion which he imagines to have been wrapped around them—subsequent accretions to the original fact—forgetting that in the narrative of the evangelists these details are the very substance of the story.

He was followed by Schleiermacher, one of the most powerful intellects and one of the noblest men that Germany has produced. He held fast by the divine element in the life, but denied the violation of natural law in the miracles; and to account for these he stretched the idea of the natural to its widest limits. He endeavored to account for Christ's foresight by supposing an organization marvellously susceptible. The healing of the sick he explains by the simple forth-putting of unique power upon the minds of the diseased, which in turn reacted on their organism. Miracles were wrought by the supernatural might of one who was above nature, but that power effected its end through natural agency. However we may dissent from his explanations of the miraculous, we cannot forget the reverence and faith of Schleiermacher. He has contributed perhaps more powerfully than any single mind in modern times to direct the current of theology to the person of Christ, and to the ethical significance of his work. His influence is everywhere traceable in subsequent theological literature.

In the year 1829, Hase offered an important contribution to German theology in his *Manual*. Following Schleiermacher in his rational explanation of the miraculous, as far as that is possible, and

attributing our Lord's works of healing to the power of the will over the body, the raising of the dead to the restoration of suspended animation, he nevertheless held that all these works were strictly miraculous, "the clear dominion of spirit over nature; no interruption of Nature's laws, but only a restoration of her pristine harmony and order." Unknown powers, possessed alone by Jesus, accelerated natural processes; this sinless perfection giving him an unique control over the material—a power of which sin had bereft the race. "In every matter of fact," he says, "which has been handed down as a miracle, it belongs to science to search for its natural causes; when these cannot be shown with historic truth and certainty, then the miracle indicates either the limits of our natural powers and natural knowledge; or else those of the age in which the miracle is recorded." He thus defines the fundamental thought of his book, "that a divine principle revealed itself in Jesus, but in a purely human form." The reports of our Lord's words and acts, however, he thinks may contain minor inaccuracies, due to the imperfect narration, and the blending of their own opinions by the historians. Hase, even more than Neander, represents the *via media* in Germany theology, midway between a frigid naturalism and a blind uncritical supranaturalism.

Six years later, in 1835, Strauss issued his famous *Life of Jesus*, intended only for the learned; and, after twenty-nine years, he has followed it by a *New Life of Jesus*, designed for the populace. The aim of the former treatise, as defined in the later, was to show that "all attempts to conceal or explain away the supernatural in the Gospel details were vain, and that consequently they were not to be claimed as strictly historical." The miraculous element was to be rejected *a priori*, and in addition a number of "contradictions and inconsistencies" could be freely pointed out. But how to account for the origin of the Gospel image of Jesus was the special puzzle which Strauss set himself to solve. His solution is well known as "the mythical theory." He admitted an original substratum of fact in the narratives, but round that nucleus of fact an imaginary series of myths had gathered, and the function of

the historian was to separate or disintegrate the two. The original fact might be somewhat as follows:—There existed at the time of Christ's birth a special messianic hope in Palastine. A remarkable Jew appeared, and conceived the idea of morally revolutionizing his age, in accordance with the prevalent hope that God was about to interpose in behalf of the nation in some signal manner. His early popularity led some of his followers enthusiastically to call him the Messiah. He received the homage reluctantly at first, but afterwards willingly. Coming into collision with the traditional Jewish party, he, without difficulty, foresaw his own death, past instances of the prophet's fate perhaps suggesting it. After his death, his disciples, mourning his lot, began most naturally to idealize their departed master. They found in the books of the Old Testament words which they twisted into messianic predictions of what had actually happened. They believed that their late teacher was not really dead; and by their excited imaginations spectral visions of his presence were easily mistaken for the reality. They proceeded, under the delusion of his continued existence, to magnify the events of his previous life, freely to idealize them, and to attribute to him the highest conceivable greatness. Thus Strauss finds in the four Gospels, instead of the history of the real Christ, a later idealized conception of him, "a legendary deposit of contemporaneous messianic ideas, the latter, perhaps, partially modified by his peculiar individuality, his teaching, and his fate."

The fundamental assumption which runs through Strauss's work is the impossibility of any history of a being other than one "entirely and clearly human. A personage half human and half divine may figure in poetry, but never in fact." Miracles are absolutely and inherently impossible. Miracle he repeatedly defines as "that heterogeneous element in life that resists all historical treatment." He refuses to believe in its real occurrence on any conceivable evidence whatever. To hear testimony from an eyewitness "would do no good; we should tell him downright that he was trifling, that he must have dreamt it, if we did not lose our opinion of his honesty, and

accuse him of absolute falsehood." As to the evangelical miracles, "not one has been recorded by an eye-witness, but, on the contrary, by those who were disposed to do anything rather than try their tradition by a critical test." He therefore proceeded to apply the same principle of explanation to the Gospel miracles which had been applied so successfully by Welcker and others to explain the growth of Greek legends and Oriental fables. They were a series of later myths, which the reverence of an after age had created, and by which it had surrounded a remarkable man with a halo of posthumous glory! And these myths had been, by the same process, historically displaced, and thrust, like a fault in geologic strata, backwards in time. The Christian myths were "not, in their original form, the conscious and intentional invention of an individual, but a production of the common consciousness of a people or religious circle." The term "myth" Strauss would limit "exclusively to those original unconscious formations which arose as by necessity."

But gradually other stories palpably unreal were invented. In the narratives of the fourth Gospel, in particular, he has the hardihood to assert that we meet with much that is conscious and deliberate invention—mere fraud, in short. In his later work, Strauss acknowledges that, "mainly in consequence of Baur's hints, he allows more room than before to the hypothesis of conscious and intentional fiction." Retaining only the fundamental ideas of his former work, the principal if not the sole consideration is to decide what the gospel history is *not*. The negation consists in this, "that in the person and acts of Jesus no supernaturalism shall be suffered to remain: for no single Gospel, nor all the Gospels, can make us debase our reason to the point of believing miracles." The affirmative counterpart to this negation is twofold—*1st*, The determination of the real history of Jesus; and, *2dly*, The explanation of the way in which the unhistorical parts of the narrative arose.

We need not follow Strauss minutely in a counter-analysis of his "peculiar apparatus for causing miracles to evaporate in myths." It is of more importance to

show how he has failed as a historical student of the era which witnessed the rise of Christianity. A deeper analysis of the state of Palestine at the time of the advent will prove the impossibility of the growth of a series of myths in the apostolic age. The very chaos of that time, the heterogeneous character of the Jewish sects, the perplexed state of political relationships, the variety of forces at work in society, the absence of simple spontaneous movements and social impulses—in short, the general alertness and multitudinousness of the time—was fatal to the growth of such a series of legends as those which Strauss has indicated. The age of the apostles was more critical and reflective than spontaneous and impulsive. There was doubt and hesitation, as well as expectancy, in the general mind. Enthusiastic idolatry of men was rare, hero-worship almost unknown. But it is only in the infancy of a nation that the mythical instinct has any range or field of operation—only in the twilight of national culture that fiction is mistaken for fact; while it is to the deification of the powers of nature (as in the polytheistic tendency) rather than to the deification of a man that the mythical instinct turns. But long prior to the advent, the Jewish mind had reached a high-water mark of intellectual vigor. Palestine had been divided for generations into opposite philosophical schools, led by astute and learned rabbis: and during the lifetime of our Lord a hot controversy raged between the pure theism of the Pharisees and the materialism of a sect which boldly denied the supernatural. If the existence of the sect of the Sadducees, and our Lord's frequent collisions with its leaders, be admitted, it is easy to see how eagerly they would have seized upon any alleged miracles that could be denied, and exposed them. This sect continued to flourish, and was variously modified, after the founding of the apostolic churches. If, then, some of the earliest acts of the church-leaders consisted in the elaboration of mythical incidents, it is inconceivable that the history of the first century should not have preserved some record of the collision of the disciples with the rationalistic sects of Palestine. The recorded "acts of the apostles" make it clear that no such col-

lision took place; and the apostolic epistles give no hint of controversies within the churches, or around them, as to the reality of our Lord's miracles—which may be deemed a proof that no such controversies existed—while the historical evidence we possess as to the moral character of the apostles, excluding on the threshold the supposition of conscious fraud, equally forbids the idea of credulity, and acquiescence in imposture. Further, the imagination of the apostles could scarcely have created the facts, when one of these which they record is their own incompetence to comprehend their Master's character, and the wonderfully delicate, but far-piercing rebukes they received for their repeated obtuseness of soul: truly a highly elaborate myth for a company of fishermen to concoct! In the Gospel narratives we are indeed in wonder-land; but it would be the *ne plus ultra* of marvels to imagine the disciples to have invented this fact, implying a dexterous artificial fraud and a wholly modern ingenuity the better to secure their credit. Besides recording without scruple these facts against themselves, some of them shortly afterwards sealed their testimony by their death. Men do not willingly die for the honor of legends. They must therefore have believed them to be facts; and if they could not easily be impostors, they must either have been true witness-bearers or the dupes of fallacious evidence. Let us therefore examine those documents received as authentic by almost all critics—the epistles of St. Paul to Rome and Corinth, and his first epistle to Thessalonica. These letters are based upon the facts of Christ's life. They imply that they were recent and well known; and we ask if a legend could grow in twenty years into such dimensions? Could a series of elaborate and unparalleled myths spring suddenly into life, and sway a whole community, within the space of two decades, especially when we remember how slowly great movements grew in that age, compared with the swift current of our modern times?

Still further, while the creation of myths is thus negated by the character of the first Christian age, the unopposed reception of fabulous stories in the second or third age, in reference to an event so momentous, is equally

inconceivable. There were hundreds and thousands of contemporary Jews who could have silenced the testimony of a few apostles, if it had been possible to contradict or to expose it; while there were many cultivated Greek and Roman minds, not predisposed in favor of Jewish tradition or Oriental legend generally, who, during the lifetime of the apostles, gave in their adherence to the Christian faith. The conquest of *their* minds by a series of Hebrew myths is a fact which Strauss does not attempt to explain. Nor does he inform us how, if this be the natural genesis of the Christian faith, it has arisen but once, in one age, and amongst one people. The formation of such myths should have proceeded equally from several centres, and thus the uniqueness of the Christian faith is unexplained by the mythical theory. Strauss has told us that he will admit the uniqueness of Jesus only "when other instances of the same unique perfection shall be clearly proved from history;"—an utterly unwarrantable dictum. But we may validly reply that we will believe in the *possibility* of a mythic origin of the Gospel narratives when other instances of the same unique perfection shall have been proved to spring from legend, or even if we could discover one parallel instance of such a growth from such a nucleus.

In the positive part of his work, Strauss endeavors, as he had done in his earlier treatise, "to point out what might have formed the historical kernel." By the most reckless and haphazard guesses he tries to remove the first deposits of the unhistorical, and to show how layer after layer may have risen above each other. But we are left in the end to gather up the fragments of an imaginary Straussian Christ. The contrast between such individual conjecture and the ascertained results of modern science (with which it invites comparison) is even startling. Guesses are not tolerated in the scientific world, though a modest conjectural hypothesis may lead the way to the discovery of unknown laws. But while the temple of science is slowly reared by pupils who build humbly on foundations laid by their teachers, literary critics do not scruple to begin their labors by an

attempt to abolish the work of their predecessors.

The admirable work of Neander on the life of Christ was mainly a reply to Strauss. But its controversial portion is not so valuable as its positive contribution to a true estimate of the life. It is so well known that it need scarcely be referred to; and amongst all subsequent "Lives" it still holds a place of honor. Defective on many points, and unmethodical in others, the manifold wisdom of the book, its large suggestiveness and rich detail, are unrivalled; while its innate truthfulness has called forth a tribute even from Strauss. Neander explains miracles by referring them to "laws of Nature as yet undiscovered," a fertile hint, which has been largely developed since, but which may be delusive if the new processes are put in the same category of "law" with the old.

Baur, Weiss, Ewald, Olshausen, Tholuck, Harless, Lange, Stier, and Ebrard, amongst German theologians, have since treated the life of Jesus with varying talent and success. Ewald is learned, profound, intense; Lange, rich in devotion, felicitous in fancies, but attenuated in his moral insight, is occasionally so fantastic that some of his thoughts depend for their beauty on the mere form of the words. There is a good deal of the mirage in his work. Stier is rich in exegetical suggestion, more imaginative than discriminative, prolix at times, and, though with occasional narrowness, has written an earnest and loving treatise on our Lord's life and works. Ebrard's is one of the most condensed and learned treatises on the subject. He considers the Gospel history first according to its form, and next according to its contents, his primary aim not being polemical, and being convinced that the statement of what he regarded as the true facts of the case is the best way to reply to objections. His tone is occasionally imperious and pragmatical, and there is a slight admixture of vanity in his work; all others having, in his opinion, failed to do that which he has succeeded in doing.

The work of M. Renan, which startled Europe in 1863, is a well-known book. Within a year it is said to have called

forth a hundred replies. It is the natural sequel in the province of French religious criticism to the dominant *Philosophie Positive*. In the years 1860-61 M. Renan had charge of the French scientific mission to Phœnicia; and he tells us that, while traversing the country in all directions, "the history which at a distance seemed to float in the clouds of an ideal world, took a form, a solidity, which astonished me. The striking agreement of the New Testament text with the places, the marvellous harmony of the Gospel ideal with the country which served it as a framework, were like a revelation. I had before me a *fifth Gospel*, torn, but still legible." But as his philosophy abjured the supernatural, he had to *construct* a new life of Jesus by eliminating the miraculous element; and, given the problem, how to find a natural explanation of the origin of Christianity by reducing its alleged marvels within the limits of natural causation, or denying the more unmanageable ones as fictions, the ingenuity of M. Renan is great, though tainted by recklessness, and the "easy" morality which winks at minor faults. It is not difficult to see that a system which starts by denying the personality of God cannot end by admitting the divine personality of Jesus. It is a slight concession, that M. Renan admits the apostolic origin of the fourth Gospel, against the school of Tübingen. This Gospel, no less than the others, he must critically test by a process of excision; and no single discourse can be received as authentic, because there were "no stenographers present to fix those fleeting words." It is noteworthy that, while he addresses himself to the stupendous task of reconstructing the history, he is not contented with suggesting a few facts as a possible nucleus, but he freely enlarges on its probable details. He has assigned himself a task almost rivalling the labor of Cuvier, who, from the fragment of a fossil bone, reproduced an ancient skeleton; and yet this seems to him one of the simplest processes in the world, requiring only modern enlightenment and the studied rejection of the miraculous! The result and the process together are utterly unscientific. He rejects and accepts at pleasure events which have the same historical vouchers, and for the mutilation of which he supplies us with no

other crucial test than his own critical fancy. One fact is taken, and another is left. This event is true, but that is interpolated, and this is a forgery. No law of selection is stated except the *a priori* dictum that all the supernatural is legendary.*

Strauss and Renan have both said that the miraculous is "that resisting element which defies historical treatment." But to give the investigator license to select, abridge, or erase at will, from a series of documents which come down to us with the identical witness of past testimony, is to transform history into legend, and criticism into romance; and the "fifth Gospel" which M. Renan "saw," and has striven to relate, is reduced to the level of an apocrypha. It is of little use to tell a historian in search of reality that "nothing to be found in the Gospels is strictly authentic," and yet that they "are truer than the naked truth, because they are truth idealized;" while the chemical test which will dissolve the spurious compound, and precipitate the pure truth, is the mere idealistic fancy of a learned and ingenious dilettante.

The chief source to which, according to Renan, we are to trace the early development of Jesus, was the influence of Nature, and the delightful climate of Galilee. The poetic aspiration after a brighter national future, nursed amid the valleys of the north, and beside the waters of its lake, imparted a soft and delicate tone to the earlier years. That delicious pastoral country inspired our Lord with his first ideas of the kingdom of God. Renan asserts that all the earlier teaching of Jesus was mild and gentle, in conformity with the gentleness of the district in which he was reared,—quietly ignoring a dozen facts to the contrary! From the "delicious idyll" of the earlier years, we

pass by an abrupt transition to the period of action, when Jesus "most unwillingly became a thaumaturgist," and the gentle rabbi glided into "the charlatan with a high purpose." The hiatus between these two periods M. Renan has not filled up, even on his own theory. He contents himself with dogmatically assuming the change, as at the fall of the curtain in a drama. Though Jesus commanded his followers, "Let your Yea be yea, and your Nay, nay," and asserted that he came himself to "fulfil the law," M. Renan can affirm that he quietly made a compromise with truth, finessed with his contemporaries, and winked at the innocent enthusiasm of the populace, who ascribed unreal miracles to his power. "His greatest miracle," says he, in a delusive epigram,— "his greatest miracle would have been his refusal to perform any." Yet they were "disagreeable to him," "imposed upon him." Some he only "thought he performed." Some were natural cures idealized by the populace, in their hunger for marvels; for example, the exquisiteness of his person cast out many devils! All the while the Founder of Christianity was utterly unacquainted with the processes of Nature, and in a state of exquisite "poetic ignorance" of her laws.

It is unnecessary to follow M. Renan through the legendary details of his own work of fiction. Its caricature of the original, its travesty of Christ's doctrine, its outrageous assumptions and utterly reckless manipulations of the story, its errors against art, have been admirably dealt with by M. Pressensé; and the rose-water adulation of the exquisite prophet of Galilee has been well described by another as "a betrayal of the Lord, but not without the kiss."

Immediately on the appearance of the *Vie de Jésus*, M. Pressensé wrote a short pamphlet in reply, entitled *The Critical School and Jesus Christ*. Few fragments of controversial literature are superior to this small book. He has since then compiled a larger treatise, entitled *Jesus Christ, his Works, Life, and Times*, which covers the whole field discussed by Strauss and Renan. He briefly announces his aim to be to "dissipate some of the misconceptions by which the God-man is veiled from the eyes of my contemporaries." In an

* He has indeed told us of "an excellent touchstone" to be found in "a kind of splendor, at once mild and terrible, a divine strength which emphasizes the authentic words, and detaches them from their apocryphal context. The real words of Jesus betray themselves spontaneously" (p. 21, Eng. Trans.) A more unscientific dictum could scarcely be devised. We may well ask whether, if a whole synod of critics were assembled, and urged to apply this touchstone independently, two of them would agree in their "detachments" of the text, or the reconstruction of its fragments—either in their analysis or their synthesis? A scientific touchstone should be precise, and not arbitrary or confusing.

orderly manner, dealing first with those questions of philosophy and history "which hold the approaches to the subject," he vindicates the supernatural on speculative grounds, and seeks to prove the originality of the Christian faith by comparing it with the decaying religions of the East, and those Oriental and Western philosophies amidst which it came as a new birth. Pressensé has ably shown that Christianity was not "a product of the various elements in the ancient world, the confluence of its streams," though the resemblances between them prove that the new religion was "made for humanity, to answer its inmost needs." He has brought varied learning to the more delicate task of literary criticism, to which he next advances, dealing with the documents in which the records of Christianity have come down to us, to establish their place and value; and he concludes by unfolding the actual life of our Lord in its chronological sequences. In the latter part of his treatise we find a marked similarity of aim to Dr. Hanna's work. In Pressensé we find the French faculty of clear comprehensiveness. He traverses a wide area, and condenses the results of his survey in a few weighty paragraphs. His sentences shine like cut crystal; but they lack the calmer depth of German thought, and the warm glow of reverent enthusiasm, which pervades the Scotch divine. Clear, subtle, and eager, he has the characteristic fire of the best French writers on morals; but the meditative depth and the poetic sight of the British mind is on the whole more valuable in one who would attempt the great task of writing the Life of the Son of Man.

But the leading characteristics of Dr. Hanna's work will be more fully seen by comparing it with recent efforts in our own literature. We have alluded to Dr. Young's *Christ of History*, a volume of pre-eminent power. It stands somewhat in the same relation to Ullmann's treatise on the *Sinlessness of Jesus*, as these volumes of Dr. Hanna to such a work as the *Life by Lange*. It is full of genuine English sense and sagacious philosophy, and is pervaded by a high tone of reverence. Ullmann may deal in a more philosophical manner with his special department of evidence, but

for comprehensive wisdom in interpreting the phenomena of our Lord's life, and drawing the legitimate inferences from them, we know no volume equal to Dr. Young's,—though Dr. Bushnell has also ably discussed the same question in a more condensed form, in one chapter of his treatise on *Nature and the Supernatural*.

In the Bampton Lectures for 1859, we find the Bishop of Gloucester endeavoring "to illustrate the connection of the events in our Lord's life, and their probable order and succession." These lectures of Dr. Ellicott's are pervaded by a lofty tone of pious emotion; but they are diffuse, rhetorical, and of slight apologetic value. The notes are better than the text. The aim of the Bampton lecturer was similar to Dr. Hanna's—"to arrange, comment upon, and illustrate the principal events in our Redeemer's earthly history; to show their coherence, their connection, order, and significance." But we miss in this treatise those clear and luminous outlines which Pressensé gives us, and those glances into the inmost secrets of the divine life,—that insight joined to catholicity which pervades the volumes before us. Dr. Ellicott is intense, poetic, reverential. He trembles with emotion in all that he writes. But his thought is too fluent. It loses precision in a deceptive rhetorical glow.

The Rev. Samuel Andrews has compiled a useful manual on the life of our Lord, dealing chiefly with its chronological aspects, in which he mainly follows Tischendorf's *Synopsis Evangelica*. His introductory essays on the dates of our Lord's birth, baptism, and death are valuable. The book is learned and accurate, but it presents a bare outline, useful mainly for reference.

The late Dr. Kitto has left a volume of "illustrations" of the life, which bears a certain resemblance in its aim to Dr. Hanna's. It contains picturesque and vivid descriptions of the chief events of our Lord's ministry. His relation to contemporary Jewish life and the society of Palestine, the state of opinion in reference to him, its fluctuations, and the results of his life-work, are drawn with rare felicity. Kitto is a photographic archaeologist, who vivifies his descriptions of place and of manners with an

almost Oriental wealth and profusion of detail.

We notice another English work, not so much for its intrinsic merit as for its partial anticipation of the order and plan which Dr. Hanna has followed. It is a series of seven volumes, by the Rev. Isaac Williams, Fellow of Trinity, Oxford, written in comparative ignorance of the questions of modern criticism, and even with a fear lest "his own inquiries should degenerate into a merely critical or scholastic dissertation;" but in which the devout author ranges over the periods of our Lord's life with the view of introducing into his work "something of the depth and devotional thought of ancient interpretation." It is a work based largely on the ancient catenas, especially on the *aurea catena* of Aquinas. But it is curious to note that the author began with the last day of the passion (issuing a tentative volume), and proceeded thence to the rest of the life, as Dr. Hanna has done. The titles of his volumes are, *The Nativity*, *The Ministry* (2 vols.), *The Holy Week*, *The Passion*, *The Resurrection*.

In the remarkable anonymous work titled *Ecce Homo* we have one of the ablest and most reverent attempts to estimate the meaning of our Lord's life, and his influence in the world. But as it is rather a treatise on Christian Ethics than a biographic study of the sacred character, we abstain from further reference to it.

Adequately to write the Life of our Lord, so as to bring out the wealth which lies half concealed and half revealed in the record of the evangelists, the biographer would require to possess such a combination of separate excellences that we can never expect to find the task excused to perfection. If it be true, as some one has said, that "it would require a second Christ to comprehend the first," it would no less require a divine biographer adequately to record a divine life. Knowledge of the philosophy of human nature, poetic insight into the physical universe and into human life, a wide knowledge of men, of the course of history, and of the forces that swayed the world prior to the Christian era, familiarity with antiquarian lore, a topographical knowledge of Palestine, the power of keen analysis

and of large constructiveness, with personal reverence and devoutness of heart, are all prerequisites to the task. These are not combined in any single individual. It is therefore vain to look for a realized ideal in biography that shall surpass the story of the four evangelists.

The latest complete effort to reproduce the scenes of that distant age, and to reset them in the framework of the nineteenth century, now lies before us. And while most of the "Lives" written recently excel this of Dr. Hanna in some one respect, it may be doubted if any of them presents such a combination of excellences. The historical, analytical, literary, topographical, and devotional features of these six volumes are less remarkable in themselves than in their union, and throughout the whole work there breathes an admirable humility. There is no parade of learning, no distracting foot-notes, no allusions for the erudite alone. It is an unencumbered, unartificial work. We are presented with the products and not with the processes of reasoning; with the results of scholarship without the display of the critical knowledge on which they are based. Dr. Hanna takes, as we have said, all the facts supplied by the four evangelists, and believing that each has its own significance, weaves the whole into a connected thread of narrative. Many surface discrepancies are thus harmonized, and the consecutiveness of the life, with its silently increasing freshness. In addition, unsuspected harmonies reveal themselves, and evidence to which the harmonist who starts with the idea that the record is full of flaws which require the correction of modern criticism is blind, becomes apparent. It is true that Dr. Hanna relies less on critical analysis in his expositions than on that loving insight which sees into the heart of questions when verbal exegesis stands still at the door. He deals much more fully with the events themselves than with the records or channel by which they come down to us. His pre-eminent aim is to ascertain the inner character of the agents in the scenes, and especially of the central Character in the narrative.

Varied psychological insight reveals itself in all his analyses of character, es-

pecially in the account given of St. Peter, St. John, and St. Thomas. From incidental phases of thought and feeling a large significance is developed. The character of the betrayer, and the motives which led Judas to the commission of the crime with which his name is associated; the "inner workings of conscience and of humanity" in Pilate; the differences between St. Peter and St. John; the explanation of the denial by the former, and of the meaning of the look which led to his repentance; the conflicting elements in the soul of St. Thomas, are all admirably rendered. The dramatic portraiture is vivid, yet most delicate: photographic, as we have said, in the sharpness of the outlines, yet with colored light and shade preserved, and with many of the phases of individuality suggested rather than portrayed; while the recital of the events of our Lord's life, so uncontroversial and undogmatic, so reverent and careful, leads at every stage to the adoration of faith. The classic grace with which the style of these volumes flows on may prevent many from perceiving the real depth of the stream, how clear the waters are, and how the heavens are reflected in them. The pervading tone is that of reverential thoughtfulness and repose. We think that Dr. Hanna's descriptions of place excel those of any other writer, with the exception of Dean Stanley, in a quiet picturesqueness, in the subdued light of local coloring with which he has invested the localities he describes. By a few vivid touches he carries us into the very heart of the scene. We have the advantage of the writer's personal visit to the localities—a fact never obtruded, but which gives a steady background of reality and of vividness to all his descriptions. We have no highly-colored figure-painting, but an exquisite *felicity*, a directness and pictorial precision which leave little to be desired.

In their descriptions of Nature, and its possible influence on our Lord, the difference between Renan and Dr. Hanna is noteworthy. According to the former, "the aspect of Nature" was "the whole education of Jesus." The soft beauty of Galilean lakes and meads, woods and hills, created a correspondingly soft beauty in the soul of the tender prophet of Nazareth; and thus the

whole history of his earlier years is "one delightful pastoral." To the deeper insight of our author, Nature's influence over Christ was only inspiring and suggestive. It supplied illustrations of the laws of his kingdom for the disciples, and the framework of parables for the people. Dr. Hanna does not presume to indicate the thoughts which the thirty years' residence in Nazareth may have quickened, but the place, "so retired, so rich in natural beauty, with glimpses of the wide world around for the morning or evening hours," where he had

"watched how the lilies grew, and saw how their Creator clothed them, had noticed how the smallest of seeds grew into the tallest of herbs; where outside the house he had seen two women grinding at one mill, inside, a woman hiding the leaven in the dough; where in the market-place he had seen the five sparrows sold for two farthings; where the sheep-walks of the hills and the vineyards of the valleys had taught him what were the offices of the good shepherd and of the careful vine-dresser—all those observations of thirty years were treasured up, to be drawn upon in due time, and turned into the lessons by which the world was to be taught wisdom."

It is instructive to note the difference between these two travellers, who have both gone over the same ground, and traced the footsteps of Jesus so far as they can be now identified—the one with a faith in the supernatural, and the other without it—both accurate observers and exquisite narrators. The difference between their interpretations is wide enough, but are we wrong in ascribing the failure of the latter to his prepossession *against* the supernatural, so that "his eye saw only what it brought with it the power of seeing?"

As a specimen of picturesque beauty in Dr. Hanna's narrative, we may select the description of the source of the Jordan at Cesarea-Philippi (*Galilean Ministry*, p. 317); and for instances in which the visit of the author to the places he has described has enabled him almost to photograph the scene, we may refer to his account of Jacob's Well, of the road from Bethany to Jerusalem past the hamlet of Bethphage, of the shores of the Lake of Tiberias, and his identification of Wady Fik as the ancient Gadara.

But the description of Nature is subordinated to a recital of the main incidents of the Life, and these incidents are again subservient to the development of character. The outward invariably yields to the inward, the physical to the moral and spiritual. Every other interest revolves around the Sacred Biography itself. The figures of the disciples move around their Master, and serve as a background of contrast to him; while all the minor

characters, Jewish, Greek, Roman, Syro-phœnician, are sketched by a delicate pencil and with singular tact. So that from a perusal of these volumes we believe that the sympathetic reader will carry away a more distinct image of the character and life of Christ, and his relation to his contemporaries, than he can gain from the more brilliant page of Pressensé, or the more elaborate discussions of Neander.

(To be continued.)

Macmillan's Magazine.

ROMAN IMPERIALISM.

LECTURES DELIVERED AT THE ROYAL INSTITUTION, 1869.

BY PROFESSOR SEELEY.

II. THE FALL OF THE ROMAN EMPIRE.

WHAT was the cause of the fall of the Roman Empire?

That after a few centuries a fabric so artificial should fall to pieces is not in itself surprising. Great empires seldom last long; they are by their very nature liable to special evils to which in time they succumb, and so the process of their downfall is commonly the same. Rome was by no means exempt from these special causes of weakness, but we shall find that Rome did not, like other empires, succumb to them. We shall find that she weathered these most obvious dangers, and that the history of her fall is as unique as that of her greatness.

The difficulty which has been found insurmountable in most great empires is their unwieldy size, and the obstinate antipathy of the conquered nationalities to their conquerors. Government must necessarily become difficult in proportion to the extent of the territory governed and the disloyalty of the inhabitants. It follows that in a great empire founded upon conquest the difficulties of government are the greatest possible. To cope with them it is found necessary to create pashas or viceroys of particular provinces, with full monarchical power. Sooner or later government breaks down, overborne partly by its insurgent subjects, partly by these viceroys shaking off its authority.

This, then, is the regular process of dissolution in empires. Subject nationalities succeed at last in recovering their independence, and subordinate governors throw off their allegiance and become kings. Sometimes the two solvents help each other, as Ali Pasha of Janina helped the early attempts of the Greek patriots. Let us take some of the more conspicuous examples which history affords. Alexander's empire was dissolved by his officers making themselves kings, and the kingdom of Pontus was formed out of it by the effort of one of the conquered nationalities. The Saracen Empire split into three independent califates. The Seljukian Empire of Malek Shah was divided in a few generations among independent sultans of Persia, Syria, Roum, &c. The Great Mogul lost his dominion partly to the insurgent Mahrattas, partly to his own viceroys of the Deccan and of Bengal. The German Empire became a nullity when the electors began to raise themselves to the rank of kings. In the Ottoman Empire the process of dissolution shows itself in Greece and Servia recovering their independence, and the Egyptian viceroy making himself a sovereign.

If we look for similar symptoms in the dissolution of the Roman Empire we are disappointed. The subject nationalities do not recover their independence. It is true that they make their separate influence felt long after they have been politically merged. The Greeks, for

example, maintained not only the independence, but the superiority of their language and their culture. Although the greatest writers of this period are Roman, yet, within half a century after the death of Tacitus and Juvenal, Greek not only prevailed in the eastern half of the Empire, but had so far superseded Latin in Rome itself, that the Emperor Aurelius uses it in meditations intended for his own private use. The Asiatic part of the Empire preserved its peculiar ways of thinking. Its religions entered into a competition both with the religions of the West and with Greek philosophy, the religion of the cultivated classes among the Romans. In this contest between the Western conquerors and the Eastern subjects the conquered races had at last the better, and imposed a religion upon their masters. Nor were the African nationalities without their influence. They gave to the Empire, in Severus, the master who first gave unlimited power to the army; and they contributed to the religious reformation its greatest rhetorician, Tertullian; its most influential politician, Cyprian; and, later, its greatest theologian, Augustine.

But though the nationalities retained so much intellectual independence, they never became dangerous to the Empire. There were indeed, in the first century, four considerable wars of independence—the rising of the Germans under Arminius, that of the Britons under Boadicea, that of the Germans and Gauls under Civilis, and that of the Jews. But the first two were not rebellions of nations already conquered, but of nations in the process of being conquered. In the case of the Germans it was the effort by which they saved their independence; in the case of the Britons it was the last convulsion of despair. The other two revolts were, no doubt, precisely of the kind which occur so frequently in great empires, and are so frequently fatal to them. But to the Roman Empire they were not fatal, and can hardly be said to have seriously endangered it. It was owing to the confusion of a revolutionary time that Civilis was able for a moment to sever the Rhenish provinces from Rome, but his success only made it more evident that his appeal to national feeling came too late, and was addressed

to that which had no existence. As soon as the vigor of the central government revived, a single army, not very well commanded, extinguished the feeble spark. Far different, certainly, was the vigor and enthusiasm with which the Jews took arms. But the result was not different. The rebellious nationality only earned by the fierceness of its rising a more overwhelming ruin.

If we reckon the Jewish war of the reign of Vespasian and that of the reign of Hadrian as constituting together one great national rebellion, then the history of the Empire affords no other considerable example besides those I have mentioned of the rising of a conquered nationality. There appear, indeed, in the third and fourth centuries, some phenomena not altogether different. The third century was an age of revolution. I have spoken already of the Roman Revolution which began with the tribunate of Gracchus and ended with the battle of Actium. It would be a convenient thing if we could accustom ourselves to the notion of a second Roman Revolution, beginning with the death of Marcus Aurelius, in A.D. 180, and ending with the accession of Diocletian, in A.D. 285. During this period the Imperial system struggled for its life, and suffered a transformation of character which enabled it to support itself over the whole extent of the Empire for more than another century, and in the eastern half for many centuries. In the fearful convulsions of this revolutionary period we are able to discern the difficulties with which the Imperial system had to cope. And among these difficulties is certainly to be reckoned the unlikeness of the nations composing the Empire. The Empire shows a constant tendency to break into large fragments, each held together internally by national sympathies, and separated from the others by national differences. The Greek-speaking world tends to separate itself from the Latin-speaking world. Gaul, Britain, and Spain tend to separate themselves from Italy and Africa. These tendencies were recognized when the revolutionary period closed in Diocletian's partition of the Empire between two Augusti and two Cæsars, and, afterwards, in the four great prefectures of Constantine. The

division between East and West, after being several times drawn and again effaced, was permanently recognized in the time of the sons of Theodosius, and is written in large characters in the history of the modern world.

The tendency then to division certainly existed, and might at times be dangerous. But it is not to be confounded with that working of the spirit of nationality which I have spoken of as the commonest cause of the ruin of great empires. In most great empires the subject nations have not only a want of sympathy, or it may be a positive antipathy, towards each other; they are influenced still more by an undying hostility towards their conquerors, and an undying recollection of the independence they have lost. Out of these feelings springs a fixed determination, handed down through successive generations, and shared by every individual member of the conquered race, to throw off the yoke at the first opportunity. Where this fixed determination exists, the conquerors have in the long run but a poor chance of retaining their conquest; for their energy is more likely to be corrupted by success than their victims' fixed hatred to be extinguished by delay. And this was the difficulty which, almost alone among conquering nations, the Romans were not called upon to meet. By some means or other they succeeded in destroying in the mind of Gaul, African, and Greek the remembrance of their past independence, and the remembrance of the relentless cruelty with which they had been enslaved. Rome destroyed patriotism in its subject races, though it left in them a certain blind instinct of kindred. When the Empire grew weak, the atoms showed a tendency to crystallize again in the old forms, but while it continued vigorous it satisfied the nationalities that it had absorbed. Whether by its imposing grandeur, or the material happiness it bestowed, or the free career it offered, particularly to military merit, or the hopelessness of resistance, or—more particularly in the West—by the civilization it brought with it; by some of these means, or by some combination of them, the Roman Empire succeeded in giving an equivalent to those who had been deprived of everything by its re-

lentless sword. As Tecmessa to Ajax, the world said to Rome—

οὐ γὰρ μοι πατρίδ' ἡρωϊκῶς ἔδωκε
καὶ μητίρ' ἀλαχ' οὐρα τὸν φέσαντά τε
καθεῖλεν Αἰδὸν θανάσιμος οἰκήτορας
τίς δῆρ' ἱμοὶ γένοιτ' ἂν ἀντὶ σοῦ πατρίς;
ἢ πλοῦτος; ἐν σοὶ πᾶσ' ἐγώ γε σώζομαι.

"Thou didst destroy my country with thy spear;

My mother and begetter eyeless Fate

Took to be tenants of the house of death.

Now then what country can I find but thee,

What household? on thee all my fortune hangs."

Of all the conquered nations, that which had the noblest past was Greece. It is a striking fact that even a hundred years ago there existed among the Greeks no proud remembrance of their heroic ancestors. Leonidas and Miltiades were names which had no magic sound to them. But they were proud of two things—of their religious orthodoxy and of their being the legitimate representatives of the Roman Empire.

The Roman Empire, then, did not fall as, for example, the Parthian Empire fell, by the rebellion of the conquered nationalities. But neither again did it fall by the rebellion of its great officers and viceroys, as the empire of Alexander. It was, indeed, constantly exposed to this danger. It felt, as other empires have felt, the necessity of creating these great officers. The Legati of the Rhine and Danube, the Legatus of Syria, possessed the power of independent sovereigns. They often seemed likely to use, and sometimes did use, this power against the government. In the first two centuries, Galba, Vitellius, Vespasian, Severus, were successful usurpers; Vindex, Avidius, Cassius, Pescennius Niger were unsuccessful ones; Corbulo, and perhaps Agricola, paid with their lives for the greatness which made them capable of becoming usurpers. But these men usurped, or endeavored to usurp, or were thought likely to usurp, the whole Empire, not parts of it. The danger of the Empire being divided among its great generals, did not appear till near the end of that revolutionary period of which I have spoken. Then, however, it seemed for a time very imminent. We might rather say that for some years the Empire was actually divided in this way. In what

is commonly called the time of the Thirty Tyrants, Gaul and Spain were governed for some years by independent emperors, while Syria and part of Asia Minor formed the kingdom of Odenathus. In other parts of the Empire, at the same time, the authority of Rome was thrown off by several less successful adventurers. At this moment, then, the Roman Empire presented the same spectacle of dissolution which other great empires have sooner or later almost always presented. It seemed likely to run the usual course, and to illustrate the insurmountable difficulty of at once concentrating great power at a number of different points, and preserving the supremacy of the centre of the whole system. But the Roman Empire rallied, and by an extraordinary display of energy proved the difficulty not to be insurmountable. It escaped this danger also, and that not only for a time, but permanently. The disease of which it died at last was not this, but another.

Of the first Roman Revolution, Marius, Cæsar, and Augustus are the heroes. The first of these organized the military system, the second gave the military power predominance over the civil, the third arranged the relations of the military to the civil power, so as to make them as little oppressive and as durable as possible. The second Roman Revolution, that of the third century after Christ, had for its heroes Diocletian and Constantine. The problem for them was to give to the military power, now absolutely predominant, unity within itself. Before, the question had been of the relations between the Emperor and the Senate; now it was of the relations between the Emperor and his Legati and his army. But now, as then, the only hope of the Empire was in despotism; the one study of all statesmen was how to diminish liberty still further, and concentrate power still more absolutely in a single hand. As Rome had been saved from barbaric invasion by Cæsar, so it was saved by Diocletian from partition among viceroys. But as it was saved the first time at the expense of its republican liberties, it was saved the second time by the sacrifice of those vestiges of freedom which Cæsar had left it. The military dictator now became a sultan. The little finger of Constantine was

thicker than the loins of Augustus; and if Tiberius had chastised his subjects with whips, Valentinian chastised them with scorpions.

The Revolution now effected had two stages. First came the temporary arrangement of Diocletian, who, in order to strengthen the Imperial power against the unwieldy army, created, as it were, a cabinet of emperors. He shared his power with three other generals, whom he succeeded in attaching firmly to himself. Such an arrangement could not last, for only a superior genius could suspend the operation of the law, *Nulla fides regni sociis*; but so long as it lasted the Imperial power was quadrupled, and the Empire was firmly ruled, not from one centre, but from four; from Nicomedia, Antioch, Milan, and Trêves. This plan had all the advantages of partition, while in the undisputed ascendancy of Diocletian it retained all the advantages of unity. This temporary arrangement in due time gave place to the permanent institution of Constantine, who broke the power of the Legati by dividing military power from the civil. Up to that time, the Legatus of a province had been an emperor in miniature—at the same time governor of a nation and commander of an army. Now, the two offices were divided, and there remained to the emperor an immense superiority over every subject,—the prerogative that in him alone civil and military power met. And at the same time that, by disarming all inferior greatness, he made himself master of the bodies, the lives, and fortunes of his subjects, he subdued their imaginations and hearts by his assumption of Asiatic state and by his alliance with the Christian Church.

Thus was the second danger successfully encountered. Rome disarmed her formidable viceroys, as she had subdued and pacified her subject nationalities. Yet in a century and a half from the time of Constantine, the Western Empire fell, and the Eastern Empire in the course of three centuries lost many of its fairest provinces, and saw its capital besieged by foreign invaders. Having escaped the two principal maladies incident to great empires, she succumbed to some others, the nature of which we have now to consider.

The simple facts of the fall of the Empire are these. The Imperial system had been established, as I have shown, to protect the frontier. This it did for two centuries with eminent success. But in the reign of Marcus Aurelius, whose reign I have noted as marking the commencement of the second revolutionary period, there occurred an invasion of the Marcomanni, which was not repulsed without great difficulty, and which excited a deep alarm and foreboding throughout the Empire. In the third century the hostile powers on every frontier begin to appear more formidable. The German tribes, in whose discord Tacitus saw the safety of the Empire, present themselves now no longer in separate feebleness, but in powerful confederations. We hear no more the insignificant names of Chatti and Chauzi; the history of the third century is full of Alemanni, Franks, and Goths. On the eastern frontier, the long decayed power of the Parthians now gives place to a revived and vigorous Persian Empire. The forces of the Empire are more and more taxed to defend it from these powerful enemies. One emperor is killed in battle with the Goths, another is taken prisoner by the Persians. But, strengthened by internal reforms, the Empire is found still capable of making head against its assailants. In the middle of the fourth century it is visibly stronger and safer than it had been in the middle of the third. Then follows the greatest convulsion to which human society is liable, that which is to the world of man what an earthquake is to nature,—I mean an invasion of Tartars. The Huns emerge from Asia, and drive before them the populations of Central Europe. The fugitive Goths crave admission into the Empire. Admitted, they engage in war with their entertainers. They defeat and kill an emperor at Adrianople. But again the Empire is avenged by Theodosius. In the age of his degenerate sons the barbaric world decisively encroaches on the Roman. There is a constant influx of Goths. Goths fill the Roman armies, and plunder the Empire under cover of a commission from the emperor himself. Rome is sacked by Alaric. Then most of Gaul, Spain, and afterwards Africa, are torn from the empire by an invasion half-Teutonic, half-

Slavonic. Barbaric chieftains make and unmake the emperors of the West. At last they assume sovereignty in Italy to themselves, and the Ostrogothic kingdom is founded. The East, too, suffers gradually a great change of population. Greece is almost re-peopled with Slaves and Wallachians. New kingdoms are founded on the Lower Danube. In the seventh century, Egypt and Syria are wrested from the Empire by the Saracens.

This is what we commonly understand by the fall of the Empire. It was matched in war with the barbaric world beyond the frontier, and the barbaric world was victorious. But it would be very thoughtless to suppose that this is a sufficient account of the matter, and that the fortune of war will explain such a vast phenomenon. What we call fortune may decide a battle, not so easily the shortest war; and it is evident that the Roman world would not have steadily receded through centuries before the barbaric had it not been decidedly inferior in force. To explain, then, the fall of the Empire, it is necessary to explain the inferiority in force of the Romans to the barbarians.

This inferiority of the Romans, it is to be remembered, was a new thing. At an earlier time they had been manifestly superior. When the region of barbarism was much larger; when it included warlike and aggressive nations now lost to it, such as the Gauls; and when, on the other hand, the Romans drew their armies from a much smaller area, and organized them much less elaborately, the balance had inclined decidedly the other way. In those times the Roman world, in spite of occasional reverses, had on the whole steadily encroached on the barbaric. The Gauls were such good soldiers, that the Romans themselves acknowledged their superiority in valor: yet the Romans not only held their own against them, but conquered them, and annexed Gaul to the Empire. If we use the word "force" in its most comprehensive sense, as including all the different forces, material, intellectual, and moral, which can contribute to the military success of a nation, it is evident that the Roman world in the time of Pompey and Cæsar was as much superior in force to the barbaric world as it

was inferior to it in the time of Arcadius and Honorius. Either, therefore, a vast increase of power must have taken place in the barbaric world, or a vast internal decay in the Roman.

Now the barbaric world had actually received two considerable accessions of force. It had gained considerably, through what influences we can only conjecture, in the power and habit of co-operation. As I have said before, in the third century we meet with large confederations of Germans, whereas before we read only of isolated tribes. Together with this capacity of confederation we can easily believe that the Germans had acquired new intelligence, civilization, and military skill. Moreover, it is practically to be considered as a great increase of aggressive force, that in the middle of the fourth century they were threatened in their original settlements by the Huns. The impulse of desperation which drove them against the Roman frontier was felt by the Romans as a new force acquired by the enemy. But we shall soon see that other and more considerable momenta must have been required to turn the scale. For in the first place, if in three centuries the barbaric world made a considerable advance in power, how was it that the Roman world did not make an immensely greater advance in the same time? A barbaric society is commonly almost stationary; a civilized society is indefinitely progressive. How many advantages had a vast and well-ordered empire like the Roman over barbarism! What a step towards material wealth and increase of population would seem to be necessarily made when the bars to intercourse are removed between a number of countries, and when war between those countries is abolished! If in the first two centuries of the Empire there were bloody wars within the Empire, yet they were both short and very infrequent; the permanent condition of international hostility between the nations surrounding the Mediterranean Sea, which had preceded the Roman conquests, was a tradition of the past. Never since has there been over the same area so long a period of internal peace. If we were guided by modern analogies, we should certainly expect that, while barbarism made its first tottering steps in the path of improvement,

the Empire would have made gigantic strides; that its population and wealth would have increased enormously; that instead of failing to defend the frontier it would have overflowed it at all points; and that it would have annexed and romanized Germany with far greater ease than in Cæsar's time it had absorbed Gaul.

In the second place, the balance had already begun to turn before any new weights were put into the scale of barbarism. A long period intervened between the time when Rome was a conquering state and the time when it began to be conquered. During this interval barbarism had acquired no new strength, and yet the Romans had ceased to conquer. And this must have been owing, not to any want of will, but to a consciousness of the want of power. For when Rome ceased to conquer, it was far more completely organized for military purposes and governed more exclusively by military men than in its period of conquest. With a citizen soldiery, summoned from farms and commanded often by civilians, Rome extended her boundaries widely; but with a magnificent standing army, with a crowd of experienced officers, and with an Emperor at the head of affairs, Rome ceased, except at long intervals, to conquer. The maxim of Augustus, that the Empire was large enough, can only mean that the limit of its resources had been reached, and that those resources, for some reason or other, did not grow. And that the maxim was sound, and continued to be sound, is shown by Hadrian's re-assertion of it when he gave up the Parthian conquests of Trajan, and later by Aurelian's evacuation of Dacia. Aurelian was a great general, Hadrian was an active and enterprising man. Both of them must have known that the easiest way to obtain popularity was to carry on wars of conquest. Both must have known that to give up conquests was the readiest way to offend the pride of the Romans, and to excite disaffection towards the government. We may therefore feel sure that it was neither love of ease nor a mere blind respect for a traditional maxim that induced these two emperors deliberately to narrow the boundaries of the Empire. They must have had a knowledge of the weakness and exhaustion of the State, and of its inadequacy to

new conquests, so certain and clear as to silence all the suggestions of ambition and interest.

We are forced, then, to the conclusion that the Roman Empire, in the midst of its greatness and civilization, must have been in a stationary and unprogressive, if not a decaying condition. Now, what can have been the cause of this unproductiveness or decay? It has been common to suppose a moral degeneration in the Romans, caused by luxury and excessive good fortune. To support this it is easy to quote the satirists and cynics of the Imperial time, and to refer to such accounts as Ammianus gives of the mingled effeminacy and brutality of the aristocracy of the capital of the fourth century. But the history of the wars between Rome and the barbaric world does not show us the proofs we might expect of this decay of spirit. We do not find the Romans ceasing to be victorious in the field, and beginning to show themselves inferior in valor to their enemies. The luxury of the capital could not affect the army, which had no connection with the capital, but was levied from the peasantry of the whole Empire, a class into which luxury can never penetrate. Nor can it be said that luxury corrupted the generals, and through them the army. On the contrary, the Empire produced a remarkable series of capable generals. From Claudius Gothicus to the patrician Aetius, a period of two centuries, the series is scarcely interrupted, and for the greater part of that time the government of the Empire itself was in the hands of men bred to war and accustomed to great commands. And as in better times, the Roman arms were still commonly victorious. Julian, fighting at great odds, defeated the Alemanni; Theodosius quelled the intruding Goths; Stilicho checked Alaric and crushed Rhadagaisus; the great Tartar himself, the genius of destruction, Attila, met his match in Aetius, and retreated before the arms of Rome.

Whatever the remote and ultimate cause may have been, the immediate cause to which the fall of the Empire can be traced is a physical, not a moral decay. In valor, discipline, and science, the Roman armies remained what they had always been, and the peasant-emperors of Illyricum were worthy successors

of Cincinnatus and Caius Marius. But the problem was how to replenish those armies. Men were wanting; the Empire perished for want of men.

The proof of this is in the fact that the contest with barbarism was carried on by the help of barbarian soldiers. The Emperor Probus began this system, and under his successors it came more and more into use. As the danger of it could not be overlooked, we must suppose that the necessity of it was still more unmistakable. It must have been because the Empire could not furnish soldiers for its own defence, that it was driven to the strange expedient of turning its enemies and plunderers into its defenders. Yet on these scarcely disguised enemies it came to depend so exclusively that in the end the Western Empire was destroyed, not by the hostile army, but by its own. The Roman army had become a barbarian horde, and for some years the Roman commander-in-chief was a barbarian prince, Ricimer, who created and deposed emperors at his pleasure. Soon after his fall, another barbarian occupying the same position, Odoacer, terminated the line of emperors, and assumed the government into his own hands.

Nor was it only in the army that the Empire was compelled to borrow men from barbarism. To cultivate the fields, whole tribes were borrowed. From the time of Marcus Aurelius, it was a practice to grant lands within the Empire sometimes to prisoners of war, sometimes to tribes applying for admission. Thus the Vandals received settlements in Pannonia, the Goths of Ulfilas in Mæsia, the Salian Franks along the Rhine. In these cases the Romans were not forced to admit the barbarians. If they were partly influenced by the wish to pacify them, it is certain also that there must have been a vast extent of unoccupied land which the Empire was glad to people in this way. However much disposed we may be to reject as rhetorical the descriptions of utter devastation along the frontier in which our authorities abound, it seems at least to be clear that, however many barbaric tribes might knock for admission, there was room for them within the Empire. Nor did these large loans of men suffice the Empire. It was perpetually borrowing smaller amounts. Under the name

of Læti and Coloni, there seems reason to believe that the Empire was already full of Germans before the great immigration began. It is easy to discover symptoms of every kind of decay in the Roman Empire. We may talk of oppressive taxation and the rapacity of officials; of the tyranny by which the curiales, or the respectable middle class, of provincial towns were crushed; of the decline of warlike spirit shown by the high price of volunteers and the extensive practice of self-mutilation to avoid the conscription; of the general decline of warlike spirit. But, however visible these symptoms may be, they must not divert our attention from the great symptom of all, the immediate and patent cause of the fall of the Empire,—that want of population which made it impossible to keep a native army on foot, and which caused a perpetual and irrepressible stream of barbaric immigration. The barbarian occupied the Roman Empire almost as the Anglo-Saxon is occupying North America: he settled and peopled rather than conquered it.

The want of any principle of increase in the Roman population is attested at a much earlier time. In the second century before Christ, Polybius bears witness to it, and the returns of the census from the Second Punic War to the time of Augustus show no steady increase in the number of citizens that cannot be accounted for by the extension of the citizenship to new classes. A stationary population suffers from war or any other destructive plague far more and more permanently than a progressive one. Accordingly we are told that Julius Cæsar, when he attained to supreme power, found an alarming thinness of population (*δεινὴν ὀλιγανθρωπίαν*). Both he and his successor struggled earnestly against this evil. The grave maxim of Metellus Macedonicus, that marriage was a duty which, however painful, every citizen ought manfully to discharge, acquired great importance in the eyes of Augustus. He caused the speech in which it was contained to be read in the Senate: had he lived in our days, he would have reprinted it with a preface. To admonition he added legislation. The Lex Julia is the irrefragable proof of the existence at the beginning of the Imperial time of that very disease of

which, four centuries after, the Empire died. How alarming the symptoms already were may be measured by the determined resolution with which Augustus forced his enactment upon the people, in spite of the most strenuous resistance. The enactment consisted of a number of privileges and precedences given to marriage. It was in fact a handsome bribe offered by the State to induce the citizens to marry. How strange, according to our notions, the condition of society must have been; how directly opposite from the present one, the view taken by statesmen of the question of population; and how unlike the present one, the view taken by people in general of marriage, may be judged from this law. Precisely as we think of marriage, the Roman of Imperial times thought of celibacy—that is, as the most comfortable but the most expensive condition of life. Marriage with us is a pleasure for which a man must be content to pay; with the Romans it was an excellent pecuniary investment,* but an intolerably disagreeable one.

Here lay, at least in the judgment of Augustus, the root of the evil. To inquire into the causes of this aversion to marriage in this place would lead me too far. We must be content to assume that, owing partly to this cause, and partly to the prudential check of infanticide, the Roman population seems to have been in ordinary times almost stationary. The same phenomenon had shown itself in Greece before its conquest by the Romans. There the population had even greatly declined, and the shrewd observer Polybius explains that it was not owing to war or plague, but mainly to the general reluctance of his countrymen to rear families. If we can suppose a similar temper to have become common among the Roman citizens, it may still seem at first sight unlikely that the newly-conquered barbarians of Gaul or Britain would fall into an effeminacy incident rather to excessive civilization. But there is reason to think, on the contrary, that the newly-conquered barbarians were especially liable to it. We know how dangerous is the sudden introduction of civilized habits and manners among barbarians. We know how fatally the

* Plutarch: *περὶ φιλοστοργίας*, c. 2.

contact of Anglo-Saxons has worked upon Indians, Australians, and New Zealanders. The effect of Roman civilization upon Gauls and Britons was similar, if we may take the evidence of Tacitus. They exchanged too suddenly a life of rude and violent adventure for the Roman baths and schools of rhetoric. The effect upon these races was an unnatural lethargy, and apparently also a tendency to decline in numbers. The Helvetians are spoken of by Tacitus as already almost extinct; and the Batavians, who distinguish themselves by their high spirit in the wars of Vitellius and Vespasian, have entirely disappeared when their territory is occupied in the fourth century by the Franks.

It remains to point out that the circumstances of the Empire between the times of Cesar and Constantine were such as rather to aggravate than mitigate the disease. One main reason why civilization in modern times is favorable to the growth of population is that it is industrial. The Anglo-Saxon subdues physical nature to his interest and convenience. Wherever he comes he introduces new industries. He contrives first to prosper, and next he increases. By his side the barbarian, skilled only in destruction, and without the inclination or talent to create anything, feels himself growing weaker and weaker, desponds, and then disappears. But Roman civilization was not of this creative kind. It was military, that is, destructive. The enormous wealth of the Romans had not been created by them, but simply appropriated. It had been gained not by manufacture or commerce, but by war. And it had been gained by the concentrated effort of many successive generations. Probably such a great national effort cannot be maintained for so long a time without giving to the national character a fixed warp or bias. The military inclination would remain to the Romans even when they had lost the power to gratify it. The aversion to all the arts of creation would remain even when nothing but those arts could save them. In the most successful conquering race that has appeared since the Romans,—in the Turks,—the same phenomenon appears. They have lost the power to conquer, but they cannot acquire habits of in-

dustry and accumulation. Their nature has no versatility; it enjoys nothing between fighting and torpid inaction. They could win an empire, but having won it they allow it to fall into ruin. In a less degree the Romans seem to have had the same defect. There runs through their literature the brigand's and the barbarian's contempt for honest industry,—at least when that industry is not agricultural. To make wealth appears to them sordid; to take it, admirable. And accordingly, when the limit of conquest and spoliation had been reached, a torpor, a Turkish helplessness, fell on them. They lived on what should have been their capital. Their wealth went to Asia in exchange for perishable luxuries, a general poverty spread through the Empire, and the unwillingness to multiply must have become stronger and stronger.

Perhaps enough has now been said to explain that great enigma, which so much bewilders the reader of Gibbon; namely, the sharp contrast between the age of the Antonines and the age which followed it. A century of unparalleled tranquillity and virtuous government is followed immediately by a period of hopeless ruin and dissolution. A century of rest is followed not by renewed vigor, but by incurable exhaustion. Some principle of decay must clearly have been at work, but what principle? We answer: it was a period of sterility or barrenness in human beings; the human harvest was bad. And among the causes of this barrenness we find, in the more barbarous nations, the enfeeblement produced by the too abrupt introduction of civilization, and universally the absence of industrial habits, and the disposition to listlessness which belongs to the military character.

A society in such a critical position as this can ill bear a sudden shock. The sudden shock came; "a swift destruction winged from God!" Aurelius, whose reign I have marked as the end of an age, saw the flash. We might say that Heaven, pitying the long death-struggle of the Roman world, sent down the Angel Azrael to cut matters short. In A.D. 166 broke out the plague. It spread from Persia to Gaul, and, according to the historians, carried off "a majority of the population." It was

the first of a long series of similar visitations. Niebuhr has said that the ancient world never recovered from the blow inflicted upon it by the plague which visited it in the reign of Aurelius. We are in danger of attaching too little importance to occurrences of this kind. The historian devotes but a few lines to them, because they do not often admit of being related in detail. The battle of Cressy occupies the historian more than the Black Death, yet we now know that the Black Death is a turning-point in mediæval English history. Our knowledge of the series of plagues which fell on the Roman world during the Revolutionary period from Aurelius to Diocletian, is extremely fragmentary. But the vastness of the calamity seems not doubtful, and it seems also clear that the condition of the Empire was just such as to make the blow mortal. It is also plain that the reconstructed Empire over which, when the revolutionary period was past, Diocletian and Constantine reigned, was different in its whole character from the Empire of the Antonines, and that a new age began then which resembled the Middle Ages as much as it resembled Antiquity.

As the population dwindled, a new evil made its appearance. The expenses of government had always been great: when complete Oriental sultanism was introduced by Diocletian, they became enormous. And the demands of government reached their highest point when the population had been decimated (the word is probably much too weak) by the plague. The *fiscus*, which had always been burdensome, became now a millstone round the neck of the sinking Empire. The demand for money became as urgent as the demand for men. A leading characteristic of the later Empire is grinding taxation. The government being overwhelmingly powerful, there was no limit to its power of extortion, and the army of officials which had now been created plundered for themselves as well as for the government. What the plague had been to the population, that the *fiscus* was to industry. It broke the bruised reed; it converted feebleness into utter and incurable debility. Roman finance had no conception of the impolicy of laying taxation so as to depress enterprise and

trade. The *fiscus* destroyed capital in the Roman Empire. The desire of accumulation withered where government lay in wait for all savings—*locupletissimus quisque in prædam correptus*. All the intricate combinations by which man is connected to man in a progressive society disappeared. The diminished population lived once more as *αὐτάρκτοι*, procuring from the soil as much as their own individual needs required, each man alone, and all alike in bondage to an omnipotent, all-grasping government. For safety they had given omnipotence to their government, but they could not give it the knowledge of political economy, nor the power to cure subtle moral evils. Accordingly all the omnipotence of government was turned to increasing the poverty, and consequently the sterility, of the population.

I have not left myself space to describe in detail the pressure of the *fiscus* and the conscription upon the different classes of the people. It is related in many books with what malignant ingenuity the men of property everywhere were, so to speak, chained to the spot where they lived, that the vulture of taxation might prey upon their vitals; and how the peasantry were in like manner appropriated and enslaved to military service. But this oppression, to which government in its helplessness was driven, filled the cup. I conceive that the downfall of the Empire is thus accounted for. Barbarians might enter freely and take possession. Vandal corsairs from Carthage might outdo the work of Hannibal, and Germany avenge at her leisure the invasions of Cæsar and Drusus, for the invincible power had been tamed by a slow disease. Rome had stopped, from a misgiving she could not explain to herself, in the career of victory. A century of repose had only left her weaker than before. She was able to conquer her nationalities. She centralized herself successfully, and created a government of mighty efficiency and stability. But against this disease she was powerless; and the disease was sterility. Already enfeebled by it she passed through a century of plague, and when the plague handed her over to the *fiscus* there remained nothing for the sufferer but gradually to sink. But the causes from

which the disease itself had sprung were such as we can but imperfectly ascertain,—causes deeply involved in the constitution of society itself, and such as no statesmanship or philosophy then in the world could hope to contend with.

NOTE.—The *Spectator*, in a flattering notice of the first of these papers, asks for an explanation of the statement that the Senate was an assembly of life peers freely chosen. The magistrates were chosen by popular election, and election to the higher magistracies carried with

it a permanent seat in the Senate. This is what I meant by calling it an assembly of life peers. I call it freely elected, because every full citizen was eligible and had a vote. No doubt the great houses had such overwhelming influence that they could in ordinary times monopolize the magistracies. But until the Revolutionary period began, I do not think this influence had much coercion in it. The great families were really revered by the people, and were considered to have a sort of moral right to office.

J. R. S.

Colburn's Monthly.

LUCREZIA BORGIA.*

It was regretted by Mr. Hallam, in a letter which lies before us, that, in the education of our youth, so little attention was given to Italian literature. Most of those who leave our schools and colleges know little of the poets and historians of Italy beyond the names of some of the more prominent; and of many of its historical characters they have the same dim knowledge.

LUCREZIA BORGIA is certainly an exception. Of few names has it been the fate—"virum volitare per ora"—so constantly as hers. She has been made pre-eminently synonymous with all that is profligate; and yet, like Mary of Scotland and Joanna of Naples, she has had some warm and believing—and, we think, more successful—defenders. The truth of history requires that her life should be fairly chronicled. Even the frequenters of the Opera may wish to learn something reliable of one who is so often brought before them in the musical record of her guilt, where (following Victor Hugo's drama) time and place and probability are alike disregarded.

Tommasi,† in a life of her more iniqui-

tous brother (l'ammirazione insieme e il terrore del suo secolo), suggests against her obscurely some diabolical innuendos, but with no better authority than the Roman gossip of the day; and, amongst historians, repeating each other with scant investigation,—Guicciardini, for instance, takes her guilt as so little to be questioned or discussed that he dismisses her in a parenthesis as "coperta di molte infamie."

Her ablest defence is in Mr. Roscoe's "Leo X.," where there is a special "Dissertation" on her character. No judgment from the bench was ever more carefully pronounced. We see the influence of his early legal studies in the clearness with which he shows how much of what is insinuated or presumed (and he brings it strongly before us) is incompatible with what we know; how easily the motives of her Neapolitan traducers may be traced; and what improbabilities a belief in the charges brought against her would involve. Mr. Gilbert does not carry the case a step further. Indeed, he sums up her defence by quoting Mr. Roscoe's concluding sentences. But he brings together a good deal of corroborative evidence. We will first, however, take from his volumes a repetition of the principal epochs of her life. She seems to have been born in 1478, one of the five children, by the same mother, who were acknowledged by the Pope as his offspring. She was well educated both in letters and religion—probably in a convent. While still very young she

* *Lucrezia Borgia, Duchess of Ferrara.* A Biography, illustrated by rare and unpublished Documents. By William Gilbert, Author of "Shirley Hall Asylum," &c. Two Vols. London: Hurst and Blackett. 1869.

† We do not recollect upon what authority this is considered as a pseudonym of Gregorio Leti. The *Life* is in two volumes, and there were to have been published, in a third volume, the "autentici documenti" upon which the work was founded; but these seem to have been suppressed.

had been affianced to a gentleman of Spain; but when her father was raised to the Papal chair the engagement, whether it had originated in affection or convenience, was set aside, and he sought to strengthen his alliances by giving her in marriage to Giovanni Sforza, Lord of Pesaro. She was then not more than sixteen. The union was of short duration. She was divorced from the Lord of Pesaro; and the policy of her father having changed, she was now married to Alfonso, Duke of Bisceglie, a natural son of Alfonso II., King of Naples. This was in 1498. The following year she had a son; and soon afterwards her husband was attacked by assassins, from whom he escaped severely wounded. During his sufferings she attended him with devoted affection. When he had nearly recovered, he was again attacked and murdered, suspicion falling upon Cesar Borgia; but this his sister does not seem ever to have known. She felt deep sorrow at her husband's death, and retired for a time to Nepi. The Pope, who was then forming new political combinations, thought it desirable to ally himself with the House of Ferrara; and in 1502 Lucrezia was married to Alfonso, the eldest son of the reigning duke.

We can scarcely conceive how eight years of a woman's early life could be more satisfactorily accounted for. It must certainly have been difficult to have been entirely pure in such a household as that of Alexander VI. and in "quel secolo dissolutissimo;" but of the atrocities imputed to her at this time, some are unsupported by any reliable evidence, some are contradicted by contemporary records, and some involve inconsistencies which cannot be reconciled. We may account for her divorce from the Lord of Pesaro—a worthless and heartless tyrant—without imputing it to any impure motive; and his having left, by a subsequent marriage, a feeble and sickly son, who did not live to succeed him in the government, is no proof that the reasons for the divorce which were said to have been urged by the Pope were not well founded. In the case of the Duke of Bisceglie, she was certainly guiltless. Next comes before us the supper described by Burchard, of whose diary there is a very good copy in the inexhaustible library of Sir Thomas Phillipps

at Thirlestaine House. In a fair transcript like this, we, of course, cannot judge whether—as alleged—the passage has been interpolated, or not. It must be admitted that it does not harmonize with what precedes and follows it.* If we could believe that it was written by Burchard at the time, and written *truly*, her presence at such a scene of infamous depravity would make us ready to believe almost anything that could be said against her. But Burchard was an enemy; and Mr. Gilbert, we think, calls up a witness who makes the accusation too improbable to be credited. It will be remembered that the event is said to have taken place on the eve of her marriage by proxy to Alfonso of Ferrara. Now, amongst the persons who formed the embassy on that occasion—which included three of Alfonso's brothers—was a gentleman specially deputed by their sister the Marchioness of Mantua, to report to her confidentially on everything that took place; and "he appears," says Mr. Gilbert, "to have performed his duty in a most conscientious and indefatigable manner." His letters, signed *S. el Prete*, are still in existence. They go into the most minute details; they do not allude in the most distant manner to anything disorderly; "or in fact to any meeting or ceremony not conducted with the strictest propriety and decorum." Another witness says, "In her house all live not only in a Christian manner, but religiously as well;" and the Venetian ambassador, when writing to the senate, most unfavorably of Rome

* Its place in the diary is between a notice of the vigil of All Saints and of the subsequent festival. We must allow, however, that there are other entries equally incongruous. One of them begins with a notice of maskings and festivities, and ends with an account of the death of the Abbot of St. Sebastian *extra muros*, and the ceremonies that followed. But we disbelieve Burchard's account of the orgies he describes, both as outrageous in itself, and as describing what was not likely to have occurred at a time when, if decency had not been a habit, it would in all probability have been assumed. We have not ourselves any proof that it was an interpolation. We rather regard it as a malicious libel. And, in confirmation of this opinion, we may mention that since the above was written, Sir Thomas Phillipps has obligingly brought to our notice another MS. volume in his invaluable collection (*Della Vita di Papa Alessandro VI.*), in which the Festino is described, but without any of its more revolting incidents; and, amongst those who were present, Lucrezia is not named.

and of the Pope, "speaks of Lucrezia as being *wise, discreet, and generous.*" All this may be fairly placed against a doubtful passage in Burchard.

There certainly seems, in the first instance, to have been a disinclination on the part of the court of Ferrara to receive the Pope's proposals for her marriage with the son of the reigning duke. It is possible that Alfonso may himself have had some unpleasant recollections of the fate of his namesake—the last of her husbands. His father's objections more probably arose from hesitating to connect himself too closely with the political complications of the court of Rome. His were reasons of state. When* the successor, therefore, of Charles VIII. of France used his influence to promote the marriage, the astute Duke Ercole saw at once that it was desirable to have the favor of a monarch who was about to pour his armies into Italy, and against whom he had no chance of forming alliances that could successfully oppose him.

In tale stato, in così dubbia sorte
 contrastar non vale.*

His son was still reluctant, but his objections were finally overcome.

On her arrival at Ferrara, Lucrezia at once gained the affection of her husband, and the admiration and respect of his father; and from this time till her death, the only whisper against her more than blameless conduct arose out of her friendship for Pietro Bembo, not yet a cardinal. This, we think, Mr. Gilbert has satisfactorily put to rest by an examination of their letters, and by the whole of the circumstances connected with the intimacy. Indeed, it is in itself an evidence of innocence when we have to seek for proofs of guilt in a friendship that appears to have arisen out of similarity of tastes and of mutual esteem, entirely without concealment or disguise.

As a bride, she had brought with her an ample dowry. Her father had also added considerably to the territory to which her husband was to succeed; and important changes in his favor were made in the conditions under which Ferrara was held as a fief of the Holy See. Great, therefore, were the rejoicings on

the celebration of the marriage. At Rome, too, they were magnificent, though blood-stained by the cruel punishment of some of the disaffected; of whom a few had dared to come forward, out of the thousands who were indignant at such lavish expense at a time of scarcity and of suffering. Even at Ferrara, the expenditure was scarcely justified by the state of the duke's treasury, which had been exhausted by the war with Venice, and was, long after that great calamity, inadequately supplied. He determined, however, that what was now regarded as so auspicious an event should be celebrated with becoming splendor.

She set out from Rome with a retinue so numerous that it has been described as having had the appearance more of an army than a marriage procession. The number of mules and horses given to her by the Pope for her journey could not have been less than a thousand; and, many nobles and ladies having offered to accompany her on her way, there were two hundred carriages. In the midst, the bride "rode on a beautiful mule, which was covered with a housing embroidered in silver and edged with gold fringe. She wore a tight vest of crimson silk, with a *sbernia* (or loose robe) of gold tissue, with large hanging sleeves, and lined with ermine. On her head she wore a hat of crimson silk, with a feather, and beneath the hat on the left side hung a pendant of pearls which reached to her ear. Altogether she made a magnificent appearance."

Discoursing upon our present theme, we may have fair readers to whom such descriptions as this will not be uninteresting. In the work itself they will find many.

Owing to the defective state of the roads, and to bad weather, her journey was slowly made; she rested a day at Urbino, and then moved onwards to the frontier of Ferrara. The duke made every preparation to do her honor. Ambassadors from all the Italian States were invited; and other guests so numerous, that, "with their officials, suites, and servants," it has been estimated that, altogether, there were "not fewer than two thousand." They were far beyond his means of accommodating them, but his nobility came willingly and hospitably to his assistance. The ambassadors

* *Filicaja*, in one of the sonnets translated by the Earl of Derby.

were lodged in their palaces, and were waited upon by their sons. Duke Ercole himself had done all that he could. He insisted "that those of the nobles who received his guests, and whose means were not of the amplest, should be at no cost for their maintenance. To prevent any expenditure on their part, he greatly enlarged the kitchens in the Estense palace and the castle, and engaged almost an army of cooks, by whom the food of the guests in the last-mentioned houses was prepared." The "commissariat," which he had also taken into his own hands, was another source of difficulty. He had determined that there should be such abundance as should "keep up the well-earned reputation of Ferrara and its dukes for lavish hospitality;" and, in his anxiety to obtain it, he seems to have collected, begged, and borrowed "so much in excess of what was necessary, that a considerable portion of it was spoiled, and had to be thrown into the river."*

At a castle belonging to the Bentivogli, about twenty miles from Ferrara, Lucrezia had her first interview with the Lord Don Alfonso, her husband. He had gone there privately, anxious to see the destined companion of his life, and he parted from her with feelings of affection that continued unabated during the nineteen years that she survived her marriage. She seems, indeed, to have had a peculiar power over all whom she wished to love her; and not only Alfonso and his father, but even the suspicious Marchioness of Mantua, whose emissary was sent to watch her at Rome, became sincerely attached to her.

Accompanied by this illustrious lady, the friend of her after life, she proceeded in the state barge to Ferrara, where she was received by the duke. He addressed her with great kindness, and, after having kissed her, introduced her to the ambassadors who followed him. She was then conducted to the palace assigned to herself and her husband.

Her dress on this occasion is described as "a camora, or short camisole, cut somewhat in the fashion of a loose-fitting

vest without waist, of crimson satin bordered with gold lace, a loose robe or *sbernia* of dark-colored satin, lined with beautiful ermine, and having very long and wide open sleeves. On her head she wore a cap or hat of gold tissue artistically embroidered with pearls, from which hung a pendant of jewels of the purest water, and of immense value."

The next day (Wednesday, February the 2d) she made her solemn entry into Ferrara with a magnificence that had never been approached, much as such exhibitions had always been the study and amusement of the duke. There was much cumbrous display, and one or two mishaps. The bride herself rode a splendid charger that became unmanageable; but she dexterously freed herself from the saddle, and was very unwillingly prevented from remounting her restive steed—riding in its stead a beautiful white mule, of which there were eighty-six (some of them splendidly decorated) in her train. At first, more serious consequences were apprehended.*

For the ceremonies, both sacred and profane, Christian and mythological, which took place on the occasion, we must refer to Mr. Gilbert's work, and shall merely copy his description of the bride herself.

"She appears" (says the writer whom he quotes as his authority) "between twenty-three and twenty-four years of age, has a beautiful face, lively sparkling eyes, is very graceful, and has a good figure. She is courteous, wise, and cheerful, and made a most pleasing effect on all who saw her." Her reception was enthusiastic.

From the date we have mentioned till the 10th of February, which was the first day of Lent, the marriage festivities continued. There were banquets, balls, and fêtes—after one of which "the bride is said to have danced many Romanesque and Spanish dances to the sound of the tambourine;" and there were many

* When no other authority is quoted, we abridge from Mr. Gilbert's work. Amongst the supplies were fifteen thousand head of poultry, the same quantity of game, and three hundred oxen and calves.

* A more provoking accident happened to a page sent from the duke with a message to the French ambassador when approaching each other in procession. The page's horse, scared by the trumpets and music, leaped with him into the thick mud of the river, giving to those who assisted him, as well as to himself, an appearance destructive of the dignified solemnity which his highness considered essential to such occasions.

offerings of presents, of various value; but, in accordance with the duke's well-known tastes, the representations given in the theatre were to be the great and repeated attraction. In preparing these no cost or labor had been spared. Five of the comedies of Plautus had been selected; of which four—the "Bacchides," "Miles," "Asinaria," and "Casina"—were performed. The first night was given to a kind of prelude. In this two of the actors personated Plautus and Epidicus—why Epidicus, except as a favorite character with its author, is not very clear; they stood, however, on opposite sides of the stage, and described in verse the different parts to be performed by the actors and the actresses, who were now brought before the audience in their respective costumes. Between each act of the comedies there was to be a *moresca*, or kind of ballet; of which we may take the description of the first as a specimen.

"It represented ten warriors, who marched forward and presented themselves to the audience. They were armed after the manner of the ancients, some with large knives, others with maces and two-handed swords, and all with daggers. Having made their obeisance, they commenced a dance to the sound of music; then suddenly they divided themselves into two parties, and in pantomime they expressed their wish to kill each other, and immediately fell to blows, each blow being struck in time with the music. Then those who were armed with maces threw them away, and all drawing their swords, stabbed (*colpi di punta*) at each other with great dexterity, dancing the whole of the time. At a given signal they threw down their swords, and, taking their daggers, attacked each other. At another signal of music, one-half of the number fell on the earth as if wounded, while the others, with the daggers in their hands, stood over them. The conquerors then bound their prisoners, and conducted them off the stage." In other of these ballets Moors were introduced; one of them was something very like the legend of St. George; in others were men bearing illuminated lanterns on their heads, or satyrs, nymphs, and subjects of rural life; and such were the interludes given between each act of the comedies. We

cannot, therefore, be surprised that the performances at the theatre occupied five hours; and as they were not the only amusements, it must have been fatiguing work. To trace the *morescas* to their origin Mr. Gilbert thinks would be somewhat difficult. The Pyrrhic dance might have been imitated in those of a warlike character; but whatever may have been their origin, we may consider them altogether as the rude models of the modern ballet d'action.

Apart from these buffooneries, he regards it as proving a high state of refinement and cultivation that an audience taken "from the higher and middle classes" should "have enjoyed in Latin" the comedies of Plautus, even with "the aid of the descriptions given by the actor who, dressed as Plautus himself, stood by the proscenium to explain the more difficult and intricate passages." But is it certain that they really were acted in Latin? Twenty years before this the duke had signalized his revival of the drama by translations which made Plautus intelligible to the people. One of these comedies—the "*Menachini*"—he had translated himself; and the "*Casina*," which was among those now performed, had been translated, at the time referred to, by Berardo.

With the arrival of Lent, the illustrious and distinguished guests took their departure; and from this point commences Lucrezia's life of purity and goodness at Ferrara. But Mr. Gilbert's succeeding chapters are more the country's annals than her own. Indeed, throughout his work he carries us backwards and forwards to portions of its history in a somewhat erratic manner. He may be pardoned, however, for he tells much that is curious and interesting. In many things the sixteenth century seems to have made little advance beyond its predecessor. Medicine could scarcely have been in so low a state in the time of Leonicenso as when, in [1542?], a diploma was given by the *Judex Sapientum* to the mountebank who swallowed a hash of live toads, that he might show the virtue of his antidote against poison, and who professed, and was believed, to cure incurable diseases; or when scorpions and vipers (sometimes *adulterated* with earthworms) were made into remedies for the plague. Nor could mechanics have been

much progressing when the public clock, in one of the towers of the castle, was worked not by machinery, but by a man stationed inside, who regulated the progression of its hands by an hour-glass placed before him. He was considered an official of some importance, well paid, and well punished for any dereliction of duty; but the contrivance he superintended reminds us very much of "the Dutchman's weathercock." Some of the police regulations were excellent. It was forbidden to give to mendicants, and both the *giver* and receiver were punishable. The better course, provided and enjoined, was to send them to the proper authority, who would provide them either with food or labor.

Other matters were not so well ordered. The unfortunate debtor was treated as a criminal. He was not only imprisoned, but carted round the city, or exposed upon a scaffold. It is not, however, for Englishmen to say much upon this point. Our own practice has very slowly been becoming more civilized. In the beginning of the present century there was, at one of our seaports, the remains of a feudal castle, used as a jail, in one of the dungeons of which, scarcely lighted, and not at all ventilated, was a poor wretch who, under the mesne process, was confined on what was literally mere *suspicion of debt*. At the foot of the stone staircase which led to his dungeon, was a great he-goat, which the official visitor was informed was placed there to take away the bad smell! "*Similia similibus curantur*."

A chapter of the second volume is given to the life and character of Duke Ercole; and to many of his admirable qualities, both of mind and person, it does justice. "Of his history," it is said, "prior to his elevation to the dukedom, little is known." Yet more than one of the chroniclers could have supplied it, if looked for; and there are references to it both in the text and notes of a volume of "Memoirs" which we noticed in our number for last February. Much of his youth was passed in Naples as the cavaliere "*senza paura*" of the court of Ferdinand, and in his service as a leader. In the volume we refer to, his part in restoring the legitimate drama is placed beyond a doubt, and the question as to his scholarship, which is again

raised by Mr. Gilbert, is also disposed of, even if it had not already been by Tiraboschi and Panizzi. "Sappiamo" (says the early historian of Naples, in addressing him) "tutti noi che in la vostra corte versiamo, niuna historia quasi Latina o Greca trovarsi che V. S. letta e intesa con diligentia non habbi." By the aid of skilful engineering, he converted deadly swamps into healthy and productive lands; and it was his pride to embellish a capital which, during his reign, had doubled its population. But his people often grumbled at the additional taxation which this entailed; for subjects generally are apt to forget that all kinds of progress must be paid for. The summer of 1505 was his last. A journey that he had intended to have made into France, with a splendid retinue, excited the jealousy of some of the Italian powers, and having been recalled, through them, by messengers from the Pope, he proceeded no further than Milan, where he was entertained with great magnificence. His health soon afterwards failed; yet, with his usual tastes, he was unable to resist the temptation of attending some splendid fêtes at Mantua, and from thence (in fulfilment of a vow) he determined to proceed to Florence. He accomplished it with difficulty, having been carried in a litter; and returning to Ferrara weak and exhausted by the effort, he died a few weeks afterwards, in his seventy-fourth year.

He was succeeded by his son Alfonso, who reigned with the same good and bad fortunes as his father. There was magnificence and misery, loyalty and discontent, and his territory was again invaded by the Venetians, who were defeated by the skill and gallantry of Aristo's friend, the fiery Cardinal Ippolito. Alfonso himself, with equal courage and success, repelled their renewed attacks; and it was by his artillery, which he had long been carefully improving, that his brilliant victories were gained.

If it were our present object, we might say much of Alfonso himself. He had many excellent qualities; and if his people often suffered, it was not from any fault of his, but from war, pestilence, and famine.

In 1519 he had to bear a great calamity by the death, in childhood, of his wife

Lucrezia. Her blameless and useful life at Ferrara was brought to an early close. That it was really a blameless and useful life we have abundant evidence. She was kind to the poor, merciful to the guilty, an affectionate wife, and a careful and devoted mother; and her piety was a constant element of her life, "though never standing forth in an offensive or ostentatious manner." Of her sincerity she gave a proof in the relinquishment of her jewels ("which were celebrated for their beauty and immense value"), to be pledged "as security for money to be advanced" for the relief of the distressed of the people.

But we do not know any more satisfactory testimony to her character than the sisterly intimacy and mutual affection between herself and the Marchioness of Mantua, one of the most celebrated and virtuous women of her day. Lucrezia's first and last letters, as the

wife of Alfonso, were addressed to her, and their constant correspondence (of which much is still in existence) bears equal and honorable proof not merely of the kindly regard, but of the charitable and pious feeling of them both.

We, therefore, have the same difficulty as Mr. Roscoe in believing it possible "that the flagitious and abominable Lucrezia Borgia and the respectable and honored Duchess of Ferrara could be united in the same person."

Though it is hard to disentangle ourselves from the traditions of centuries, we cannot but think that wrong has hitherto been done to her memory; and in closing our brief notice of Mr. Gilbert's work, we are reminded of the late Judge Crompton's laconic charge to a jury: "The facts, gentlemen, are now before you. It is for you to say whether you think the prisoner guilty."

"*I don't!*"

St. Paul's Magazine.

IS THE GULF STREAM A MYTH?

THE Gulf Stream has recently attracted a large share of the attention of our men of science. The abnormal character of the weather which we experienced last winter has had something to do with this. The influence of the Gulf Stream upon our climate, and the special influence which it is assumed to exercise in mitigating the severity of our winters, have been so long recognized, that meteorologists began to inquire what changes could be supposed to have taken place in the great current to account for so remarkable a winter as the last. But it happened also that at a meeting of the Royal Geographical Society early in the present year the very existence of the Gulf Stream was called in question, just when meteorologists were disposed to assign to it effects of unusual importance. And in the course of the discussion whether there is in truth a Gulf Stream—or rather whether our shores are visited by a current which merits such a name—a variety of interesting facts were adduced, which were either before unknown or had attracted little attention. As at a recent meeting of the same society these doubts have been renewed, we propose to examine briefly, in the first

place, a few of the considerations which have been urged against the existence of a current from the Gulf of Mexico to the neighborhood of our shores; and then, having rehabilitated the reputation of this celebrated ocean river—as we believe we shall be able to do—we shall proceed to give a brief sketch of the processes by which the current-system of the North Atlantic is set and maintained in motion.

In reality the Gulf Stream is only a part of a system of oceanic circulation; but in dealing with the arguments which have been urged against its very existence, we may confine our attention to the fact that, according to the views which had been accepted for more than a century, there is a stream of water which, running out of the Gulf Stream through the Narrows of Bemini, flows along the shores of the United States to Newfoundland, and thence right across the Atlantic to the shores of Great Britain. It is this last fact which is now called in question. The existence of a current as far as the neighborhood of Newfoundland is conceded, but the fact that the stream flows onward to our shores is denied.

The point on which most stress is placed is the shallowness of the passage called the "Bemini Narrows," through which it is assumed that the whole of the gulf-current must pass. This passage has a width of about forty miles, and a depth of little more than six hundred yards. The current which flows through it is perhaps little more than thirty miles in width, and a quarter of a mile in depth. It is asked, with some appearance of reason, how this narrow current can be looked upon as the parent of that wide stream which is supposed to traverse the Atlantic with a mean width of some five or six hundred miles. Indeed a much greater width has been assigned to it, though on mistaken grounds: for it has been remarked that since waifs and strays from the tropics are found upon the shores of Portugal, as well as upon those of Greenland, we must ascribe to the current a span equal to the enormous space separating these places. But the circumstance here dwelt upon can clearly be explained in another way. We know that of two pieces of wood thrown into the Thames at Richmond, one might be picked up at Putney and the other at Gravesend. Yet we do not conclude that the width of the Thames is equal to the distance separating Putney from Gravesend. And doubtless the tropical waifs which have been picked up on the shores of Greenland and of Portugal have found their way thither by circuitous courses, and not by direct transmission along opposite edges of the great gulf-current.

But certainly the difficulty associated with the narrowness of the Bemini current is one deserving of careful attention. Are we free to identify a current six hundred miles in width with one which is but thirty miles wide, and not very deep? An increase of width certainly not less than thirty fold would appear to correspond to a proportionate diminution of depth. And remembering that it is only near the middle of the Narrows that the Gulf Stream has a depth of four hundred yards, we could scarcely assign to the wide current in the mid-Atlantic a greater depth than ten or twelve yards. This depth seems altogether out of proportion to the enormous lateral extension of the current.

But besides that even this considera-

tion would not suffice to disprove the existence of a current in the mid-Atlantic, an important circumstance remains to be mentioned. The current in the Narrows flows with great velocity, certainly not less than four or five miles an hour. As the current grows wider it flows more sedately; and opposite Cape Hatteras its velocity is already reduced to little more than three miles an hour. In the mid-Atlantic the current may be assumed to flow at a rate little exceeding a mile per hour, at the outside. Here, then, we have a circumstance which suffices to remove a large part of the difficulty arising from the narrowness of the Bemini current, and we can at once increase our estimate of the depth of the mid-Atlantic current five-fold.

But this is not all. It has long been understood that the current which passes out through the Narrows of Bemini corresponds to the portion of the great equatorial current which passes into the Gulf of Mexico between the West Indian Islands. We cannot doubt that the barrier formed by those islands serves to divert a large portion of the equatorial current. The portion thus diverted finds its way, we may assume, along the outside of the West Indian Archipelago, and thus joins the other portion,—which has in the meantime made the circuit of the gulf,—as it issues from the Bemini Straits. All the maps in which the Atlantic currents are depicted present precisely such an outside current as we have here spoken of, and most of them assign to it a width exceeding that of the Bemini current. Indeed, were it not for the doubts which the recent discussions have thrown upon all the currents charted by seamen, we should have been content to point to this outside current as shown in the maps. As it is, we have thought it necessary to show that such a current must necessarily have an existence, since we cannot lose sight of the influence of the West Indian Isles in partially damming up the passage along which the equatorial current would otherwise find its way into the Gulf of Mexico. Whatever portion of the great current is thus diverted must find a passage elsewhere, and no passage exists for it save along the outside of the West Indian Isles.

The possibility that the wide current,

which has been assumed to traverse the mid-Atlantic, may be associated with the waters which flow from the Gulf of Mexico, either through the Narrows or round the outside of the barrier formed by the West Indies, has thus been, as it seems to us, satisfactorily established. But we now have to consider difficulties which have been supposed to encounter our current on its passage from the Gulf to the mid-Atlantic.

Northwards, along the shores of the United States, the current has been traced by the singular blueness of its waters until it has reached the neighborhood of Newfoundland. Over a part of this course, indeed, the waters of the current are of indigo blue, and so clearly marked that their line of junction with the ordinary sea-water can be traced by the eye. "Often," says Captain Maury, "one-half of a vessel may be perceived floating in Gulf Stream water, while the other half is in common water of the sea,—so sharp is the line, and such the want of affinity between the waters, and such, too, the reluctance, so to speak, on the part of those of the Gulf Stream to mingle with the littoral waters of the sea."

But it is now denied that there is any current beyond the neighborhood of Newfoundland,—or that the warm temperature, which has characterized the waters of the current up to this point, can be detected farther out.

It is first noticed that, as the gulf-current must reach the neighborhood of Newfoundland with a north-easterly motion, and, if it ever reached the shores of the British Isles, would have to travel thither with an almost due easterly motion, there is a change of direction to be accounted for. This, however, is an old, and we had supposed exploded, fallacy. The course of the Gulf Stream from the Bemini Straits to the British Isles corresponds exactly with that which is due to the combined effects of the motion of the water, and that of the earth upon its axis. Florida being much nearer than Ireland to the equator, has a much more rapid easterly motion. Therefore, as the current gets farther and farther north, the effect of the easterly motion thus imparted to it begins to show itself more and more, until the current is gradually changed from a north-easterly to an almost easterly stream. The process is the

exact converse of that by which the air-currents from the north gradually change into the north-westerly trade winds as they get farther south.

But it is further remarked that as the current passes out beyond the shelter of Newfoundland, it is impinged upon by those cold currents from the Arctic seas, which are known to be continually flowing out of Baffin's Bay and down the eastern shores of Greenland; and it is contended that these currents suffice, not merely to break up the gulf-current, but so to cool its waters that they could produce no effect upon the climate of this country if they ever reached its neighborhood.

Here, again, we must remark that we are dealing with no new discovery. Captain Maury has already remarked upon this peculiarity. "At the very season of the year," he says, "when the Gulf Stream is rushing in greatest volume through the Straits of Florida, and hastening to the north with the greatest rapidity, there is a cold stream from Baffin's Bay, Labrador, and the coasts of the north, running south with equal velocity. . . . One part of it underruns the Gulf Stream, as is shown by the icebergs which are carried in a direction tending across its course." There can be no doubt, in fact, that this last circumstance indicates the manner in which the main contest between the two currents is settled. A portion of the Arctic current finds its way between the Gulf Stream and the continent of America; and this portion, though narrow, has a very remarkable effect in increasing the coldness of the American winters. But the main part, heavier, by reason of its coldness, than the surrounding water, sinks beneath the surface. And the well-known fact mentioned by Maury, that icebergs have been seen stemming the Gulf Stream, suffices to show how comparatively shallow that current is at this distance from its source, and thus aids to remove a difficulty which we have already had occasion to deal with.

Doubtless the cooling influence of the Arctic currents is appreciable; but it would be a mistake to suppose that this influence can suffice to deprive the gulf-current of its distinctive warmth. If all the effect of the cold current were operative on the Gulf Stream alone we might

suppose that, despite the enormous quantity of comparatively warm water which is continually being carried northwards, the current would be reduced to the temperature of the surrounding water. But this is not so. The Arctic current not only cools the gulf-current, but the surrounding water also,—possibly to a greater extent, for it is commonly supposed that a bed of common sea-water separates the two main currents from each other. Thus the characteristic difference of temperature remains unaffected. But in reality we may assume that the cooling effect actually exercised by the Arctic-current upon the neighboring sea is altogether disproportionate to the immense amount of heat continually being carried northwards by the Gulf Stream. It is astonishing how unready two sea-currents interchange their temperatures,—to use a somewhat inexact mode of expression. The very fact that the littoral current of the United States is so cold,—a fact thoroughly established,—shows how little warmth this current has drawn from the neighboring seas. Another fact, mentioned by Captain Maury, bears in a very interesting manner upon this peculiarity. He says, “if any vessel will take up her position a little to the northward of Bermuda, and steering thence for the Capes of Virginia, will try the water-thermometer all the way at short intervals, she will find its reading to be now higher, now lower; and the observer will discover that he has been crossing streak after streak of warm and cool water in regular alternations.” Each portion maintains its own temperature even in the case of such warm streaks as these, all belonging to one current.

Similar considerations dispose of the arguments which have been founded on the temperature of the sea-bottom. It has been proved that the living creatures which people the lower depths of the sea, exist under circumstances which evidence a perfect uniformity of temperature; and arguments on the subject of the Gulf Stream have been derived from the evidence of what is termed a minimum thermometer,—that is, a thermometer which will indicate the lowest temperature it has been exposed to,—let down into the depths of the sea. All such arguments, whether adduced

against or in favor of the Gulf Stream theory, may be held to be futile, since the thermometer in its descent may pass through several submarine currents of different temperature.

Lastly, an argument has been urged against the warming effects of the Gulf Stream upon our climate which requires to be considered with some attention. It is urged that the warmth derived from so shallow a current as the Gulf Stream must be, by the time it has reached our shores, could not provide an amount of heat sufficient to affect our climate to any appreciable extent. The mere neighborhood of this water at a temperature slightly higher than that due to the latitude, could not, it is urged, affect the temperature of the inland counties at all.

This argument is founded on a misapprehension of the beautiful arrangement by which nature carries heat from one region to distribute it over another. Over the surface of the whole current the process of evaporation is going on at a greater rate than over the neighboring seas, because the waters of the current are warmer than those which surround them. The vapor thus rising above the Gulf Stream is presently wafted by the south-westerly winds to our shores and over our whole land. But as it thus reaches a region of comparative cold the vapor is condensed,—that is, turned into fog, or mist, or cloud, according to circumstances. It is during this change that it gives out the heat it has brought with it from the Gulf Stream. For precisely as the evaporation of water is a process requiring heat, the change of vapor into water,—whether in the form of fog, mist, cloud, or rain,—is a process in which heat is given out. Thus it is that the south-westerly wind, the commonest wind we have, brings clouds and fogs and rain to us from the Gulf Stream, and with them brings the Gulf Stream warmth.

Why the south-westerly winds should be so common, and how it is that over the Gulf Stream there is a sort of air-channel along which winds come to us as if by their natural pathway, we have not space here to inquire. The subject is full of interest, but it does not belong to the question we are considering.

It would seem that a mechanism involy-

ing the motion of such enormous masses of water as the current-system of the Atlantic should depend on the operation of very evident laws. Yet a variety of contradictory hypotheses have been put forward from time to time respecting this system of circulation, and even now the scientific world is divided between two opposing theories.

Of old the Mississippi river was supposed to be the parent of the Gulf Stream. It was noticed that the current flows at about the same rate as the Mississippi, and this fact was considered sufficient to support the strange theory that a river can give birth to an ocean-current.

It was easy, however, to overthrow this theory. Captain Livingston showed that the volume of water which is poured out of the Gulf of Mexico in the form of an ocean-stream is more than a thousand times greater than the volume poured into the gulf by the Mississippi river.

Having overthrown the old theory of the Gulf Stream, Captain Livingston attempted to set up one which is equally unfounded. He ascribed the current to the sun's apparent yearly motion and the influence he exerts on the waters of the Atlantic. A sort of yearly tide is conceived, according to this theory, to be the true parent of the gulf-current. It need hardly be said, however, that a phenomenon which remains without change through the winter and summer seasons cannot possibly be referred to the operation of such a cause as a yearly tide.

It is to Dr. Franklin that we owe the first theory of the Gulf Stream which has met with general acceptance. He held that the Gulf Stream is formed by the outflow of waters which have been forced into the Caribbean Sea by the trade-winds: so that the pressure of these winds on the Atlantic Ocean forms, according to Dr. Franklin, the true motive power of the Gulf Stream machinery. According to Maury, this theory has "come to be the most generally received opinion in the mind of seafaring people." It supplies a moving force of undoubted efficiency. We know that as the trade-winds travel towards the equator they lose their westerly motion. It is reasonable to suppose that this is caused by friction against the surface of the ocean, to which, therefore, a corresponding westerly motion must have been imparted.

There is a simplicity about Franklin's theory which commends it favorably to our consideration. But when we examine it somewhat more closely, several very decided flaws present themselves to our attention.

Consider, in the first place, the enormous mass of water moved by the supposed agency of the winds. Air has a weight,—volume for volume,—which is less than one eight-hundredth part of that of water. So that to create a water-current, an air current more than eight hundred times as large and of equal velocity must expend the whole of its motion. Now the trade-winds are gentle winds, their velocity scarcely exceeding in general that of the more swiftly-moving portions of the Gulf Stream. But even assigning to them a velocity four times as great, we still want an air-current two hundred times as large as the water-current. And the former must give up the whole of its motion, which in the case of so elastic a substance as air, would hardly happen, the upper air being unlikely to be much affected by the motion of the lower.

But this is far from being all. If the trade-winds blew throughout the year we might be disposed to recognize their influence upon the Gulf Stream as a paramount if not the sole one. But this is not the case. Captain Maury states that, "With the view of ascertaining the average number of days during the year that the north-east trade-winds of the Atlantic operate upon the currents between twenty-five degrees north latitude and the equator, log-books containing no less than 380,284 observations on the force and direction of the wind in that ocean were examined. The data thus afforded were carefully compared and discussed. The results show that within these latitudes,—and on the average,—the wind from the north-east is in excess of the winds from the south-west only 111 days out of the 365. "Now, can the north-east trades," he pertinently asks, "by blowing for less than one-third of the time, cause the Gulf Stream to run all the time, and without varying its velocity either to their force or to their prevalence?"

And besides this we have to consider that no part of the Gulf Stream flows strictly before the trade-winds. Where

the current flows most rapidly, namely, in the Narrows of Bemini, it sets against the wind, and for hundreds of miles after it enters the Atlantic "it runs," says Maury, "right in the wind's eye." It must be remembered that a current of air directed with considerable force against the surface of still water, has not the power of generating a current which can force its way far through the resisting fluid. If this were so, we might understand how the current, originating in sub-tropical regions, could force its way onward after the moving force had ceased to act upon it, and even carry the waters of the current right against the wind, after leaving the Gulf of Mexico. But experience is wholly opposed to this view. The most energetic currents are quickly dispersed when they reach a wide expanse of still water. For example, the Niagara below the falls is an immense and rapid river. Yet when it reaches Lake Ontario, "instead of preserving its character as a distinct and well-defined stream for several hundred miles, it spreads itself out, and its waters are immediately lost in those of the lake." Here again the question asked by Maury bears pertinently on the subject we are considering. "Why," he says, "should not the Gulf Stream do the same? It gradually enlarges itself, it is true; but, instead of mingling with the ocean by broad spreading, as the immense rivers descending into the northern lakes do, its waters, like a stream of oil in the ocean, preserve a distinctive character for more than three thousand miles."

The only other theory which has been considered in recent times to account satisfactorily for all the features of the Gulf Stream mechanism was put forward, we believe, by Captain Maury. In this theory, the motive power of the whole system of oceanic circulation is held to be the action of the sun's heat upon the waters of the sea. We recognize two contrary effects as the immediate results of the sun's action. In the first place, by warming the equatorial waters, it tends to make them lighter; in the second place, by causing evaporation, it renders them saltier, and so tends to make them heavier. We have to inquire which form of action is most effective. The inquiry would be some-

what difficult, if we had not the evidence of the sea itself to supply an answer. For it is an inquiry to which ordinary experimental processes would not be applicable. We must accept the fact that the heated water from the equatorial seas actually does float upon the cooler portions of the Atlantic, as evidence that the action of the sun results in making the water lighter.

Now, Maury says that the water thus lightened must flow over and form a surface-current towards the poles; while the cold and heavy water from the polar seas, as soon as it reaches the temperate zone, must sink and form a submarine current. He recognizes in these facts the mainspring of the whole system of oceanic circulation. If a long trough be divided into two compartments, and we fill one with oil and the other with water, and then remove the dividing plate, we shall see the oil rushing over the water at one end of the trough, and the water rushing under the oil at the other. And if we further conceive that oil is continually being added at that end of the trough originally filled with oil, while water is continually added to the other, it is clear that the system of currents would continue in action: that is, there would be a continual flow of oil in one direction along the surface of the water, and of water in the contrary direction underneath the oil.

But Sir John Herschel maintains that no such effects as Maury describes could follow the action of the sun's heat upon the equatorial waters. He argues thus: Granting that these waters become lighter and expand in volume, yet they can only move upwards, downwards, or sideways. There can be nothing to cause either of the two first forms of motion, and as for motion sideways, it can only result from the gradual slope caused by the bulging of the equatorial waters. He proceeds to show that this slope is so slight that we cannot look upon it as competent to form any sensible current from the equatorial towards the polar seas. And even if it could, he says, the water thus flowing off would have an eastward instead of westward motion, precisely as the counter-trade-winds blowing from equatorial to polar regions have an eastward motion.

It is singular how completely the supporter of each rival view has succeeded in overthrowing the arguments of his opponent. Certainly Maury has shown with complete success that the inconstant trade-winds cannot account for the constant gulf current which does not even flow before them, but,—in places,—exactly against their force. And the reasoning of Sir John Herschel seems equally cogent, for certainly the flow of water from equatorial towards polar regions ought from the first to have an eastward, instead of a westward motion; whereas the equatorial current, of which the Gulf Stream is but the continuation, flows from east to west, right across the Atlantic.

Equally strange is it to find that each of these eminent men, having read the arguments of the other, reasserts, but does not effectually defend, his own theory, and repeats with even more damaging effect his arguments against the rival view.

Yet one or other theory must at least point to the true view, for the Atlantic is subject to no other agencies which can for a moment be held to account for a phenomenon of such magnificence as the Gulf Stream.

It appears to us that, on a close examination of the Gulf Stream mechanism, the true mainspring of its motion becomes apparent. Compelled to reject the theory that the trade-winds generate the equatorial current westward, let us consider whether Herschel's arguments against the "heat theory" may not suggest a hint for our guidance. He points out that an overflow from the equator pole-wards would result in an eastward, and not in a westward, current. This is true. It is equally true that a flow of water towards the equator would result in a westward current. But no such flow is observed. Is it possible that there may be such a flow, but that it takes place in a hidden manner? Clearly there may be. Submarine currents towards the equator would have precisely the kind of motion we require, and if any cause drew them to the surface near the equator, they would account in full for the great equatorial westward current.

At this point we begin to see that an important circumstance has been lost

sight of in dealing with the heat theory. The action of the sun on the surface-water of the equatorial Atlantic has only been considered with reference to its warming effects. But we must not forget that this action has drying effects also. It evaporates enormous quantities of water, and we have to inquire whence the water comes by which the sea-level is maintained. A surface-flow from the subtropical seas would suffice for this purpose, but no such flow is observed. Whence, then, can the water come but from below? Thus we recognize the fact that a process resembling suction is continually taking place over the whole area of the equatorial Atlantic, the agent being the intense heat of the tropical sun. No one can doubt that this agent is one of adequate power. Indeed, the winds, conceived by Franklin to be the primary cause of the Atlantic currents, are in reality due to the merest fraction of the energy inherent in the sun's heat.

We have other evidence that the indraught is from below in the comparative coldness of the equatorial current. The Gulf Stream is warm by comparison with the surrounding waters, but the equatorial current is cooler than the tropical seas. According to Professor Ansted, the southern portion of the equatorial current, as it flows past Brazil, "is everywhere a cold current, generally from four to six degrees below the adjacent ocean."

Having once detected the mainspring of the Gulf Stream mechanism, or rather of the whole system of oceanic circulation,—for the movements observed in the Atlantic have their exact counterpart in the Pacific,—we have no difficulty in accounting for all the motions which that mechanism exhibits. We need no longer look upon the Gulf Stream as the rebound of the equatorial current from the shores of North America. Knowing that there is an underflow towards the equator, we see that there must be a surface-flow towards the poles. And this flow must as inevitably result in an easterly motion as the underflow towards the equator results in a westerly motion. We have, indeed, the phenomena of the trades and counter-trades exhibited in water-currents instead of air-currents.

Temple Bar.

THE POETRY OF THE PERIOD.

MR. MATTHEW ARNOLD. MR. WILLIAM MORRIS.

It seems an ungracious, and certainly it is no pleasing task, to approach the poetical productions of those who have added to our store of mental and spiritual pleasure in other than a spirit of grateful appreciation. To criticize what you have not paid for has never been esteemed an amiable course, and grace rather than cavilling would appear to be the fitting return for meals gratuitously provided. If gift-horses are not to be looked in the mouth, surely the Pegasus of the Poet, the freest possible gift to all mankind, should not be subjected to too rigorous an inspection. Would it not be better, then, to be blind to the defects and shortcomings of those singers, whom we really feel to be such, and to confine ourselves to an indiscriminating love of their beauties and an unquestioning admiration of their merits? If comparisons are odious, of whom could they be more odious than of poet with poet? When a woman's loveliness is the theme of praise, is it not the height of ill-manners to decry her form because some other woman's is more faultless, or to depreciate her face because a second can be named whose countenance is still more radiant? What companion is there more detestable than he who, when you are wrought to a pitch of ecstatic delight over some glorious natural prospect, intrudes on your enthusiasm with the untimely reminder that it is not so varied as such an one, or not so extensive as such another? Why then, instead of joining in the chorus of praise which surges round the really precious verse of Mr. Tennyson, or in the somewhat less loud but equally intense clamor of welcome which has greeted the muse of Mr. Swinburne, have we rebuked the ardor of their worshippers, and gone out of our way to protest that, though reasonable commendation is well bestowed upon each of them, there is such a thing as unreasonable commendation, and that it is being most recklessly lavished on what they have contributed to the literature of their country? Why could we not

be content to take them for what they are, and be thankful, mildly abstaining from any inquiry into what they are not?

The objection is a natural one; but it is very easily answered. Criticism—or what is so termed—makes criticism necessary. Did the admirers of living poets confine themselves to a just and proper appreciation of their qualities, it is obvious there would be no room for such protests as we have thought it our duty to make. We may add that just as little would there have been any temptation to make them. It is foolishly extravagant praise, and unweighed words of adulation, that compel us to interfere. It is when a crowd of unjudicial and injudicious people indulge in such language as has been well embodied by the first of the two poets whose names are at the head of this paper—

"Tempts not the bright new age,
Shines not its stream?
Look! ah what genius,
Art, Science, wit!
Soldiers like Cæsar,
Statesmen like Pitt!
Sculptors like Phidias,
Raphaels in shoals,
Poets like Shakespeare—
Beautiful souls!"—

that the critic who has learned to strike something like a fair balance between the efforts of competing genius, waxes indignant at such preposterous pretensions, and prays some of these wonderful modern phenomena to come down a little lower. Is General Grant a soldier like Cæsar? Is Baron Marochetti like Phidias, and are Mr. Leighton, Mr. Millais, or Mr. Anybody else you may choose to mention with R.A. at the end of his name, equal to Raphael? Poets like Shakespeare! Let us not talk of it; the thing grows too absurd. Yet these are the absurdities we are constantly compelled to read—not perhaps always distinctly asserted, but tacitly assumed—in the critical jargon of the period. We think it might rouse the very stones to mutiny. We, at least, have been no longer able to sit quiet under it.

Moreover, if any apology be required, which we very much doubt, unless it be by those whose extravagance has provoked our protest, and whom our protest naturally irritates, it should be remembered that, over and above the attempt here made to vindicate the fame of really great poets dead and gone, our aim has likewise been to couple the poetry of to-day with the day that produces it, and, whilst assigning it its due place, to account for the fact of its being no better and greater than it is. Not in any spirit of depreciation, but from a sense of justice mingled with the analyzing mind we borrow from the age in which we write, have we been urged to this particular investigation.

None the less, however, as we said at starting, is the indication of the shortcomings of living poets, whom it would be an unmixed gratification only to praise, a distasteful function; and never could it be more distasteful than in discoursing of the works of two such writers as Mr. Matthew Arnold and Mr. William Morris. Should these pages ever meet their eye, we pray them to believe that we regard them and their works with extreme reverence. In the case of Mr. Matthew Arnold one experiences an additional repugnance to the undertaking we have conscientiously imposed on ourselves, because he himself evidently sees and feels—what is there that he does not see and feel?—the force of all the objections we have to make to contemporaneous verse (his own included), and likewise the uncritical temper in which it is usually mentioned. The sardonic lines we just now quoted show how strongly he disapproves the improper mentioning in the same breath of the giants of old with the pigmies of to-day; and those which he prefixes to the second volume of his "Poems" are of themselves enough to demonstrate in what estimation he holds the poetry, either actual or possible, of such an age as that in which it is his lot to live:

"Though the Muse be gone away,
Though she move not earth to-day,
Souls, erewhile who caught her word,
Ah! still harp on what they heard."

He cannot bring himself to refrain from song, but he owns in his inmost heart that there is that without him, if not

within him, which will prevent it from being such as was possible before the Muse had gone away. Again and again he recurs to this painful—this overwhelmingly sad conviction. In some of the most exquisite and pathetic lines he ever wrote, "Stanzas from the Grande Chartreuse," it is not only faiths that are dead and gone, but the paralysis which smites the lyre in the interval between their disappearance and some hoped-for palingenesis, that move him to this mournful strain:

"Wandering between two worlds, one dead,
The other powerless to be born,
With nowhere yet to rest my head,
Like these, on earth I wait forlorn.
Their faith, my tears, the world deride;
I come to shed them at their side.

* * * * *
There yet, perhaps, may dawn an age,
More fortunate, alas! than we,
Which without hardness will be sage,
And gay without frivolity.
Sons of the world, oh haste those years,
But till they rise allow our tears!"

He goes about the world, oppressed with the sense not only of the unjoyous, but of the unspiritual character of the times in which he has been given his brief span of life. Even when Empedocles is the supposed spokesman, it is still Mr. Arnold that speaks through him:

"And yet what days were those, Parmenides!

* * * * *
Then we could still enjoy, then neither thought
Nor outward things were closed and dead to us,
But we received the shock of mighty thoughts
On simple minds with a pure natural joy.

* * * * *
We had not lost our balance then, nor grown
Thought's slaves, and dead to every natural joy."

Mark the distinction he draws between being Thought's slaves and "receiving the shock of thought,"—a distinction recalling Wordsworth's "Thought was not; in enjoyment it expired," quoted by us when protesting against Mr. Browning's deep thoughts being considered poetry—and a distinction which, moreover, eminently corroborates the position we have persistently maintained, whilst insisting on the specific nature of poetical genius. Burning to bring back such days, and to be no longer Thought's slave, Mr. Arnold confesses, with sad reiteration, the vanity of his desires. No amount of knowledge, no profundity of research, will give him the poet's strong free, spontaneously soaring pinion. In

deed, they help only to weigh him down to the ground :

"Deeply the poet feels! but he
Breathes, when he will, immortal air,
Where Orpheus and where Homer are.
In the day's life, whose iron round
Hems us all in, he is not bound;
He escapes thence, but we abide.
Not deep the poet sees, but wide!"

Here again we meet with a striking confirmation of the contrast we have pointed out between deep thoughts and lofty thought—a contrast which, it is plain, haunts Mr. Arnold, and the consciousness of which is to him the explanation of his own comparative powerlessness, and of that of his poetical contemporaries. They are all hemmed in and cannot escape. They abide, and cannot mount to breathe the immortal air where Orpheus and where Homer are. The age, not great, but big and exacting, forbids them to get beyond its influences; and its most imperative influences are those which fasten men down, not those which lend them buoyancy. And what is worst and most grievous of all is, that all the poet's efforts to baffle them are bootless:

"And long we try in vain to speak and act
Our bidden self, and what we say and do
Is eloquent, is well—but 'tis not true!
And then we will no more be rack'd
With inward striving, and demand
Of all the thousand nothings of the hour
Their stupefying power.
Ah yes, and they benumb us at their call."

Enormous is the power of the age over us; but it is "stupefying," and Mr. Arnold feels that it has, in a sense, benumbed him far more than it has benumbed all save the chosen few whom he resembles. In order not to be so affected by it, one must remain aloof from it. Yet with what result? Let Mr. Arnold himself answer in his "Stanzas in Memory of Obermann." After a laconic and somewhat unsatisfactory reference to Wordsworth as one of the only two spirits besides Obermann who have seen "their way in this our troubled day," he goes on to acknowledge—

"But Wordsworth's eyes avert their ken
From half of human fate"—

and to explain that if his spirit was freer from mists, and much clearer than ours, it was because—

"... though his manhood bore the blast
Of a tremendous time,
Yet in a tranquil world was passed
His tenderer, youthful prime."

To us tranquillity and a tremendous time have both been denied; and we cannot avert our ken from what is now to be seen, even if we would:

"But we, brought forth and rear'd in hours
Of change, alarm, surprise—
What shelter to grow ripe is ours?
What leisure to grow wise?"

Like children bathing on the shore,
Buried a wave beneath,
The second wave succeeds before
We have had time to breathe."

It is ever with him the same complaint. The tree of knowledge of which we have been forced to partake, is no more the tree of song than it is the tree of life. We know all—or we think we do—but all that we can effect with our knowledge is to sigh under the burden of it. The age is sick with a surfeit of analysis, and Mr. Arnold is sick along with it. Not content with half, we have grasped the whole; and, having got it, we have only proved the truth of the old admonition, that the half is often more than the whole. We should like to throw it away, but we cannot; so we keep harping on our disappointment. When Chaucer wrote, and even when Spenser, then could men "still enjoy;" came the times of Shakespeare and Milton, and they could act—not with paralyzing infirmity of purpose—not with benumbing doubts, firstly, as to whether they ought to act at all, and, secondly, whether the way in which they were acting was the right way—but with a grand, confident, powerful conviction that there was a particular work to do, and they were the particular men sent to do it. In such an age the poet caught the infectious certainty and direct energy of his time, and, deterred by no scruples of his own, and no dread—indeed, no consciousness—of adverse influences, flung the whole of himself, brain, heart, soul, and passion, into his momentous work. Two hundred years were to pass away before any other such epoch was to arrive. The close of the eighteenth and the opening years of the nineteenth century made a period marked by a fervor to which the world had long been a stranger; but the fervor

was new, and all its own. It was the fervor of the iconoclast blent with that of the architect. Never was there an age so bent on destruction; but it destroyed in the burning faith that it could build again, and build better. Politics, constitutions, social ties, humanity itself, were to be reconstructed and reorganized. The old gods were to be dethroned, but new ones, and new ones that should reign for ever, were to take their place. Some singers caught more the destroying tone, some more the constructive one; but even in the misanthropical splendors of Byron's tremendous strains there is hope, and even with the sanguine mysticism of Shelley's beatific song there blends the anger of divine rage that the old rubbish is not sufficiently quickly carted away, and the rough places made smooth. But none of them hesitated: they were strong and swift, for they were sure; the native hue of resolution was not sicklied o'er with the pale cast of thought. In Washington Irving's "Tales of the Alhambra," there is a story of a treasure which none could find, though everybody knew it to be there, until at last a happy youth hit upon the exact spot whither the two eyes of a marble statue converged; then the secret was unfolded, and the treasure discovered. So is it with the inward eyes of men: their gaze must converge; they must look in one and the same direction, or they point to nothing. In what direction is our modern gaze turned? In two directions, and in each infirmly. One eye glances towards the past, with a feeling partly of love, but still more of dread, lest we should have broken with its wisdom; while the other, with an earnest timidity, strains to find light in the dimness of the future, and ever and anon closes utterly from weariness and despair. We can no longer believe in Olympus; and the Pagan theology and theology, in spite of Mr. Swinburne, are dead for evermore; whilst, as far as that portion of humanity is concerned from which original poetry can ever be hoped for, Christianity in any sincere sense is virtually just as extinct. To use Mr. Tennyson's words, the most open and sensitive minds now amongst us

" . . . sit apart, holding no form of creed,
But contemplating all."

We have emptied the heavens and the

earth of everything but man and the indefinite unknowable, and stand very properly tolerant in the vacant space we have created. We have made a mental solitude, and call it peace. We mean no reproaches: we are simply stating facts. It is not our fault, perhaps, but it is woefully our misfortune. Every thoughtful man and woman feels it; the age feels it; the poet feels it. He, more than any other, is unable to mistake the dead past for the living present; he, more than any other, is unable to mistake what have now proved to be mirages and phantoms for new births and solid promises of the future. "For what availed it," asks Mr. Arnold, in the poem from which we have once before quoted:

"For what availed it, all the noise
And outcry of the former men?—
Say, have their sons obtained more joys?
Say, is life brighter now than then?"

We have been in the Land of Promise which the fervor of our immediate sires pointed out, and fancied they had bequeathed us, and we have found it, some worse, none better, than the desert they bewailed. So, though we inherit the ruins they made, we have no fresh shelter for our heads; past and future alike fail us,

"For both were faiths, and both are gone."

Gone with them, too, says Mr. Arnold, is "the nobleness of grief," and he begs that the "fret" may not be left now that the nobleness is taken away. He is almost ashamed of himself for singing at all. "The best are silent now," he says:

"Achilles ponders in his tent;
The kings of modern thought are dumb;
Silent they are, though not content,
And wait to see the future come.
They have the grief man had of yore,
But they contend and cry no more.
Our fathers watered with their tears;
This sea of time whereon we sail;
Their voices were in all men's ears
Who passed within their puissant hail.
Still the same ocean round us raves,
But we stand mute and watch the waves."

What wonder, then, that in moments when they cannot be quite mute, nor yet content themselves with bemoaning their impotence, Mr. Arnold, and others like him, should reproduce the literature of the past, and, as he says, now that "the Muse be gone away," try to "harp on what they heard"? In a sonnet to a

friend, beginning, "Who prop, thou ask'st, in these bad days, my mind?" he answers, Homer and Epictetus:

"But be his
My special thanks
Who saw life steadily, and saw it whole:
The mellow glory of the Attic stage,
Singer of sweet Colonus and its child."

What must be the mental and spiritual condition of an age, when one of its poets turns away from it to seek his comfort and inspiration in the writings of Sophocles? That a student should do so, that a philosopher should do so, that a cynic should do so, were intelligible enough; but a poet! The Muse must, indeed, have fallen upon evil days and evil tongues, before this could be; and that she has done so, is the explanation of the Poetry of the Period. We have seen how Mr. Swinburne, too, when flying from the sensuous atmosphere of erotic lyricism, can find no refuge but in the "mellow glory of the Attic stage," and the "something Greek about" Mr. Tennyson's idyllic manner, has been repeatedly noticed, even to the extent of some of the recent translators of Homer having founded their style upon it. We shall see directly how far the same remark is applicable to Mr. Morris; but Mr. Arnold saves us from all further necessity of investigation, by his "special thanks," and by the obvious echoes of those "who prop his mind," in three of his longest works: "Empedocles on Etna," "Sohrab and Rustum," and "Balder Dead," and in several shorter pieces. A very few examples will suffice to illustrate our meaning:

"But as a troop of pedlars from Cabool,
Cross underneath the Indian Caucasus,
That vast sky-neighboring mountain of milk
snow;
Winding so high, that, as they mount, they
pass
Long flocks of travelling birds dead on the
snow,
Choked by the air, and scarce can they them-
selves
Slake their parch'd throats with sugared mul-
berries—
In single file they move, and stop their breath,
For fear they should dislodge the o'erhanging
snow—
So the pale Persians held their breath with
fear."

Sohrab and Rustum.

"And as a stork, which idle boys have trapp'd
And tied him in a yard, at autumn sees
Flocks of his kind pass flying o'er his head
To warmer lands, and coasts that keep the
sun—
He strains to join their flight, and from his
shed
Follows them with a long complaining cry—
So Hermon gazed and yearn'd to join his kin."
Balder Dead.

"But an awful pleasure bland
Spreading o'er the Thunderer's face,
When the sound climbs near his seat,
The Olympian council sees!
As he lets his lax right hand,
Which the lightnings doth embrace,
Sink upon his mighty knees.
And the eagle at the beck
Of the appeasing, gracious harmony,
Droops all his sheeny, brown, deep-feather'd
neck,
Nestling nearer to Jove's feet."
Empedocles on Etna.

Why need we point out what these passages sufficiently indicate for themselves?—that they are the echo of an echo, written less by the Poet than by the Professor of Poetry; that the writer's mind is leaning upon props, and that here he is not himself? This may be the verse of the period, but we can scarcely call it the poetry of the period; it is too academical for that. It is the result and expression of culture, not of impulse. What Mr. Arnold is really like when his impulses master him, we have seen. "Your creeds are dead," he cries:

"Your creeds are dead, your rites are dead,
Your social order too!
Where tarries He, the Power who said,
See, I make all things new?

... the past is out of date,
The future not yet born:
And who can be alone elate
While the world lies forlorn?"

It is in vain and idly that he ascends the "blanched summit bare of Malatrait," there to conclude with an ephemeral effort at being sanguine:

"Without a sound,
Across the glimmering lake,
High in the Valais depth profound
I saw the morning break."

Such a conclusion is just as hollow, unsatisfactory, and—we speak objectively—as insincere, as the solution,

which is no solution, given by Mr. Tennyson in "The Two Voices," when

"The sweet church bells began to peal."

Unhappily, sweet church-bells are no longer any answer to a sad but edifying scepticism that is the martyr of its own candor; and Mr. Arnold proves to us over and over again that he has seen no morning break, and that only those now see it who, like Wordsworth,

" . . . avert their ken
From half of human fate."

In his unrest he gazes at the star-sown vault of heaven, and he gets for answer:

"Would'st thou be as these are? Live as they!
Unaffrighted by the silence round them,
Undistracted by the sights they see."

But how soon is it before he hears another voice, saying:

"Calm's not life's crown, though calm is well!"

What, then, is it? Mr. Arnold cannot tell us. Neither can the age in which he lives. Homer knew what it was: it was fighting, loving, and singing. Epictetus knew what it was: it was renunciation. Christ knew what it was: it was to leave all things and follow Him. Shakespeare knew what it was: it was, as with the singer of sweet Colonus and its child, to see life steadily, and see it whole. Byron knew what it was: it was to exhaust and then abuse it. But we? But Mr. Arnold?

"Ah! two desires toss about
The poet's feverish blood!
One drives him to the world without,
And one to solitude."

No doubt they do in these days; but the days have been when they did not, and when one, and only one, feverish commanding desire, whatever it might happen to be, stirred the poet's blood and ruled it. Otherwise we should have inherited no greater poetry than now, alas! we can ourselves produce. Great ages, productive of great things, whatever else may characterize them, have always this one salient characteristic—that they have made up their minds. We have not made up ours, and we cannot make them up. Two desires toss us about, as they

toss about our poet. The old injunction to steer the middle course is of no avail here. Mr. Tennyson has steered it, and we have as a consequence his golden mediocrity. Mr. Arnold has never been able to subdue himself to this pitch; and so, whilst Mr. Tennyson's verse is the resultant of the many social and spiritual forces of the time, Mr. Arnold's is fraught with the visible forces themselves, now in its lines expressing one, now another. Anon he makes an effort to submit:

"Be not too proud.
Thy native world stirs at thy feet unknown,
Yet there thy secret lies!
Out of this stuff, these forces, thou art grown,
And proud self-severance from them were
disease.
O scan thy native world with pious eyes!
High as thy life be risen, 'tis from these;
And these, too, rise."

But this mood of humble optimism is ephemeral. He chafes at "this stuff," and owns the disease of a yearning for proud self-severance:

"The glow . . . the thrill of life,
Where, where do these abound?—
Not in the world, not in the strife
Of men, shall they be found.
He who hath watch'd, not shared, the strife,
Knows how the day has gone;
He only lives with the world's life
Who has renounced his own."

This last assertion can be accepted only with a most important and pregnant qualification. There is no necessity for a man with high and noble aspirations to renounce his own life in order to live with the world's, if the aspirations of the world at the same time likewise happen to be high and noble. Granted a great age, and a man capable of being great in the direction in which the greatness of the age itself tends, what need of renunciation of one's life then? The age and the man will be one. No two desires will toss either about. They will pull strongly, and pull together. Even this age produces men to whom, not as men, indeed, but under some other connotation, the epithet "great" may be applied. It produces great speculators, great contractors, great millionaires, great manipulators and mountebanks. But poets! Alas! none of these. How can it? It cannot give what it

has not got; and it has not got the divine *afflatus*. To live with it, the man who has must indeed renounce his own life; and his own individual possession of the divine *afflatus* helps him not—save to gasp and to flutter. He can do little or nothing, unless the age assists him. He might as well think to fly in vacuum, swim without water, or breathe without air. Mr. Arnold has tried, and feels that he has done that little or nothing—that he has failed; that he had better have remained pondering, like Achilles in his tent; that the wisest course would have been to keep silent:

"Silent—the best—are silent now!"

Turn we to the singer of, perhaps, the most unvarying sweetness and sustained tenderness of soul that ever caressed the chords of the lyre. Whom can we mean, if not Mr. William Morris, the author of "The Life and Death of Jason," and "The Earthly Paradise"? Even the critic, accustomed to grasp frail things firmly, almost shrinks from handling these exquisite poems with any but the lightest touch, and in turning them to the light, is fain to finger them as one does some beautiful fragile vase, the fruit of all that is at once simple and subtle in human love and ingenuity. Under a blossoming thorn, stretched 'neath some umbrageous beech, or sheltered from the glare of noon by some fern-crested Devonshire cliff, with lazy summer sea-waves breaking at one's feet—such were the fitting hour and mood in which—criticism all forgot—to drink in the honeyed rhythm of this melodious storer. Such has been our happy lot; and we lay before this giver of dainty things thanks which even the absence of all personal familiarity cannot restrain from being expressed affectionately. But if we are to persist in our task—if we are really to understand the "Poetry of the Period," we must needs lay aside for awhile the delicacy of mere gratitude, and attempt some more genuine estimate of Mr. Morris's poems than is implied in the fervent acknowledgment of their winsome beauty. Delightful as a writer standing by himself and on his own merits, he is invaluable to us when considered along with the other writers whose precise station and significance in poetical literature we

have striven to discover: invaluable when we apply to him the test already applied to them, and inquire how comes it that his muse is such as she is, and no other and no greater?

For in Mr. Morris is plain and obvious what in Mr. Tennyson, Mr. Swinburne, and Mr. Arnold has to be made so by some little examination, unravelling, and exegesis on the part of the critic. They halt infirmly and irresolutely between two currents, two influences, two themes. Mr. Morris's poetical allegiance is undivided. Now lured to sing of the Golden Year, now of *Cenone*—now fancying, as in *Aylmer's Field*, that a poem of value can be constructed out of the tritest and most threadbare of modern incidents, and now flying back across the centuries in the hope that King Arthur and his Knights may yield more enduring material for the texture of his strains—the Laureate has alternately courted the past and the future, without ever once being able to satisfy our, and, we presume, his own, ineradicable longings for a great contemporaneous poem. In Mr. Swinburne, endowed as he is with more fire and less skill, the results of these conflicting influences are far more apparent, and he is in turns coldly classical and effusively and erotically modern—modern, as of to-day. When we pass to Mr. Arnold, we find him not only likewise a prey to this inevitable distraction—this sundering of the poet's soul in twain, this irreconcilable combat for it between the past and the future, because the present is not strong enough to hold it against the claims of either; but we see him conscious of the raging struggle of which he is the subject and the victim, and conscious whence is derived his impotence, and that of his peers, to wreak full undivided self on song, and produce a great poet linked for all time with a great period. In his own words, he

"Wanders between two worlds: one dead,
The other powerless to be born."

Now, in Mr. Morris we have nothing of this. He, too, like Mr. Arnold, has taken the measure of the age in which, whatever he will do this side the "cold straight house," must be done; but, unlike Mr. Arnold, he has cut himself off from all its active influences, compound-

ed of disgust, sanguineness, impatience, and despondency, and has surrendered himself wholly to the retrospective tendency of his time, which, when taken by itself, is the most pathetic and poetical proclivity of which the time is capable. He ignores the present, and his eyelids close with a quiet sadness if you bid him explore the future. He has no power, he says, to sing of heaven or hell. He cannot make quick-coming death a little thing; neither for his words shall we forget our tears. His verses have no power, he candidly confesses, to bear the heavy trouble and bewildering care that weigh down the earners of bread. All he can do is to sing of names remembered, which, precisely because they are not living, can ne'er be dead. He finds no life in anything living, in anything around and about him; and he feels no impulse to strive vainly to vitalize them:

"Dreamer of dreams, born out of my due time,
Why should I strive to set the crooked straight?
Let it suffice me that my murmuring rhyme
Beats with light wing against the ivory gate,
Telling a tale not too importunate
To those who in the sleepy region stay,
Lulled by the singer of an empty day."

The realities of the latter half of the nineteenth century suggest nothing to him save the averting of his gaze. They are crooked; who shall set them straight? For his part, he will not even try. He knows that effort would be vain; and he warns us not

"To hope again, for aught that I can say."

He feels that he has wings, but all he can do with them is to beat against the ivory gate. He sings only for those who, like himself, have given up the age, its boasted spirit, its vaunted progress, its infinite vulgar nothings, and have taken refuge in the sleepy region. Not only conscious of, but vitally imbued with, the truth of Mr. Arnold's words, when applied to such a period as this, that

"He only lives with the world's life
Who has renounced his own"—

Mr. Morris refuses to renounce the latter, and throws over all the sights, sounds, and struggles of the former, such as they are, to quote Mr. Coventry Patmore,

"in these last days, the dregs of Time."
Having done so, he invites us to

"Forget six counties overhung with smoke,
Forget the snorting steam and piston-stroke,
Forget the spreading of the hideous town,"

and to forgive him that he cannot ease the burden of our fears, but can only strive to build a shadowy isle of bliss in the golden haze of an irrevocable past. Again and again he repeats what it is he can and what it is he cannot do:

"Yet as their words are no more known aright
Through lapse of many ages, and no man
Can any more across the waters wan
Behold those singing women of the sea—
Once more I pray you all to pardon me,
If with my feeble voice and harsh I sing,
From what dim memories may chance to cling
About men's hearts, of lovely things once sung
Beside the sea, while yet the world was young."

A certain comparative feebleness there may be in his voice—must be, indeed, in any voice that is laden with the suppressed sob of back-looking regret, as contrasted with one firmly charged with present messages or confident presages of a grand approaching future; but harshness is there none, here or ever, in the strains of this dulcet client of Apollo. But whether feeble or harsh, or whatever to men's ears it may fairly seem, his muse refuses to wander from the sleepy region:

"Alas! what profit now to tell
The long unwearied lives of men
Of past days—threescore years and ten,
Unbent, unwrinkled, beautiful,
Regarding not death's flower-crowned skull,
But with some damsel intertwined
In such love as leaves hope behind!
Alas! the vanished days of bliss.
Will no god send some dream of this,
That we may know what it has been?"

For all the unprofitable nature of reverting to these vanished days, he never quits them. But he is conscious all the while that it is a strange thing for a poet, a maker, a seer, to turn his back on his own time in order to dwell, through memory, in "that flowery land, fair beyond words," his love for which, he declares, no scorn of man can kill:

"Thence I brought away
Some blossoms that before my footsteps lay,
Not plucked by me, not over-fresh or bright;
Yet since they minded me of that delight,

Within the pages of this book I laid
 Their tender petals, there in peace to fade.
 Dry are they now, and void of all their scent
 And lovely color; yet what once was meant
 By these dull stains, some men may yet descry,
 As dead upon the quivering leaves they lie."

What beautiful humility in the metaphor! Yet, we are constrained to add, what truth! What delicate loveliness, what rich hues, what lingering fragrance

even, in the tales of "The Earthly Paradise," and in the rhymed story of "The Life and Death of Jason"! But, for all that, the delicacy, the color, the scent, are as of pressed flowers, "not plucked by me." How far short, then, of not being plucked at all, but still bright, dew-sprinkled, odorous, and blossoming

"In lovely meadows of the ranging land,
 Wherein erewhile I had the luck to stand!"

Intellectual Observer.

PHILLIPS ON VESUVIUS.*

PROFESSOR PHILLIPS has produced a classical work on the most interesting of European volcanoes. In it he has collected together a mass of matter of the highest scientific import, while his clear descriptions and graceful style will secure for his labors a wider circulation amongst the class of general readers than is often attained by an exact and learned book. The work is illustrated by eleven plates and thirty-five "diagrams," some of which are justly so designated, while others are artistic sketches made by the author, and evincing no ordinary amount of technical skill.

The early history of Vesuvius as a volcano is unknown. Previous to the great eruption of A.D. 79, the mountain had experienced a long period of repose. Seneca, who lived a little earlier than the outburst of 79, noticed the eruptive character of the adjacent rocks, and Strabo, about 30 B.C., "remarking the cindery aspect and cavernous rocks, as if eaten by fire, conjectured that in ancient times the country was all in a state of burning, being full of fiery cavities, though now extinct for want of fuel;" and he adds, "Perhaps this is the cause of its fertility." Vitruvius is also cited by Professor Phillips as having preserved a tradition that at some period, which had become antique by the time of Augustus, Vesuvius had vomited fire amongst the fields; and Tacitus is quoted to show that, in his mention of the eruption in the reign of Titus, he speaks

of that incident as a repetition of what had occurred "long ages before." Diodorus Siculus (B.C. 45) likewise states that "the whole region was named Phlegræan, from the culminating point now called *Odesobon*, bearing many indications of having emitted fire in ancient time."

The fertility of the soil and the long continuance of rest had encouraged the growth of a numerous population within a few miles of the mountain, and their first alarm seems to have been excited by earthquakes, one of which shattered the cities of Pompeii and Herculaneum at the time when Nero made his appearance on the stage at Naples. The earth-shakings continued for sixteen years, till on the 24th August, A.D. 79, they made the "whole country reel and totter," and then came the eruption, in which the elder Pliny lost his life, and which destroyed the two cities, and covered a large tract of country with suffocating ashes. If the elder Pliny had been so fortunate as to have escaped, we should have had something like a scientific account of what occurred. As it is, we have only the letters, referring to the circumstances of his uncle's death, written by the younger Pliny to Tacitus, some years after the event. The Plinies were at Misenum, and about 1 P.M. on the 24th of August, A.D. 79, the mother of the younger one called attention to a curious cloud hanging over the Vesuvian region. From the distance, it was not clear from which mountain the cloud proceeded, but it was "like a pine-tree, for it shot up to a great height in the form of a trunk, which extended itself at the top into a sort of branches." Many

* "Vesuvius," by John Phillips, M.A., Hon. Fellow of Magdalen College, Oxford, D.C.L. Oxford, LL.D. Cambridge, LL.D. Dublin, F.R.S., F.G.S., Professor of Geology in the University of Oxford, Oxford, at the Clarendon Press.

times since has the famous "pine-tree cloud" hung in terrific beauty over the landscape, but this was its first appearance in the historic period; and we cannot wonder that the elder Pliny, who was in command of the Roman fleet at Misenum, at once ordered a light vessel to be got ready, that he might go nearer and examine the strange phenomenon. His nephew's preference for stopping at home with his books seems unaccountable, unless we ascribe it to fear, notwithstanding his explicit declarations that no such feeling possessed him, at a later period, when flying with his mother from a destruction which he consoled himself with thinking threatened the whole world.

As the elder Pliny was passing out of the house, he received despatches from Retina—the site of the modern Resina, not far from Herculaneum—soliciting his aid, as there was no escape from the fiery perils, except by sea. He proceeded at once with his ships towards the coast, but the sudden retreat of the sea threatened to leave them aground, and the showers of hot cinders and stones made it impossible to take the direction he intended along the coast by Herculaneum and Retina. He then ordered the pilot to carry him to Pomponianus, at Stabiae, south of Pompeii, and nearly double the distance of that city from the mountain. The eruption continued with great violence, the court which led to the apartment in which he retired to rest became filled with stones and ashes, while violent concussions shook the houses. Pliny, Pomponianus, and the rest of the company went into the open country, with pillows tied with napkins on their heads. They walked towards the shore, intending to re-embark, but the waves rendered this impossible, and the younger Pliny states that flames and noxious vapors dispersed the party, and speedily caused his uncle's suffocation. Professor Phillips doubts the accuracy of this description of the closing scene. He thinks flames and sulphurous vapors could hardly be present at Stabiae, ten miles from the centre of the eruption.

The difference between modern and ancient times is very strikingly shown in the paucity of information which has come down to us concerning this tremendous eruption. No scientific travel-

lers, or unscientific, but graphic "special correspondents," hastened to collect particulars. Young Pliny does not say a word about the fate of the two cities, although he gives a vivid picture of the lesser horrors at Misenum, which affected his mother and himself. Martial, writing a few years after the event, makes a passing allusion to both the devastated towns, and Dion Cassius long after (A.D. 230) speaks of them briefly as buried under an "inexpressible quantity of dust."

Pompeii was overwhelmed with dry ashes, while Herculaneum was either buried in erupted mud, or what may perhaps be more likely, under dust converted into mud by torrents of rain. Sir William Hamilton was convinced that the city was covered with "liquid mud" issuing from Vesuvius, and he saw the head of a statue dug out, and leaving a perfect impression in the tufa, which had encased it like a mould.

Previous to the eruption of 79, the mountain appears to have presented the form of a single cone, truncated and hollowed out at the top. In the year 203, what Dion Cassius calls a "mighty conflagration" occurred, confined to the middle of the mountain, and from his description Professor Phillips concludes that nothing like the modern cone of Vesuvius was then known; but that some idea was preserved of a mountain top more elevated and more contracted than that left after the eruption of A.D. 79.

In 472 there was a great outpouring of ashes, spreading as far as Constantinople; 512, 685, and 993 were also years of eruption, and in 1036, Francis Scot, in his "Itinerary of Italy," relates that it happened not only from the top, but its sides, and that its burning products ran into the sea. In 1049 more lava currents are described as running to the sea. An eruption is also mentioned in 1138, and in 1139 Vesuvius was reported to have flamed for eight days, and to have ejected so much dust and stones for thirty days, that the whole interior was consumed, and the crater is stated to have remained empty till 1631, though volcanic activity was manifested in 1306 and 1500.

"December A.D. 1631 occurred the great convulsion, whose memorials are written widely on the western face of

Vesuvius in ruined villages, and left in layers of ashes over hundreds of miles of country, or in heaps of mud swept down by hot water floods from the crater. The crater itself was dissipated in the convulsion." This great commotion occurred sixteen centuries after the Plinian eruption, and "since then the mountain has never been at rest."

Professor Phillips gives a table of the eruptions of Etna and Lipari, Vesuvius, and the volcanoes of the Phlegrean tract known to have occurred since the sixth century, B.C., in which none were recorded. In the fifth century, B.C., Etna and Lipari made two eruptions, and one occurred in the Phlegrean fields. In the second century, B.C., there were five Etna and Lipari eruptions, and two in the first century, together with one Phlegrean outburst. In the first century, A.D., one took place in Etna, and one great one in Vesuvius. In the third century, A.D., Etna and Vesuvius had an eruption each, and Vesuvius did not make two in a century until the eleventh, A.D., was reached. It was not till the seventeenth century that more than two Vesuvian eruptions occurred, and in that century there were four, and fourteen of Etna and Lipari. The eighteenth century witnessed twenty-three Vesuvian and fifteen Etnean eruptions, and in the nineteenth century we have already had twenty-four Vesuvian and ten Etnean outbursts. It is remarkable that the Icelandic eruptions seem to have reached a maximum in point of number in the eighteenth century, and taking the European volcanoes altogether, it would seem that "not less than 2000 years is the average interval between two epochs of maximum frequency in the combined systems of active European volcanoes, and that these apparently separate systems may have a common dependence on some generally recurring condition more extensive than the whole triangular area within which they are placed."

Professor Phillips observes that, in considering the history of Vesuvius as of other volcanoes,—as indeed of other natural phenomena,—we distinguish not only *periods* of greater or less action, but *crises* of violence, and epochs of unusual energy. In the series of eruptions from Vesuvius, we may fix on those of A.D. 79, 1631, 1737, 1767, 1779, 1794, 1823, 1855,

1858, as among the more remarkable for the extent of their lava currents, or the abundance of ashes, or the height and splendor of the eruptive columns, which often seemed to deserve the title of liquid fire spouted up to the clouds. The magnitude of the eruptions may be in some degree estimated by the mass of lava ejected. Thus, in A.D. 1737, the mass of lava was estimated at 10,237,096 cubic metres, and in A.D. 1794, a larger quantity flowed, estimated at 20,744,445 cubic metres, both calculations being made by Breislak. "The ashy showers" are believed "to have carried three times as much matter from Vesuvius as the lava currents."

The phenomena associated with Vesuvius, and similar eruptions, are enumerated by Professor Phillips, as shakings and displacement of the land, retreat and return of great sea-waves, or raising sea-bed, the sky filled with uprushing volumes of expanded vapor, speedily condensing in clouds and rains, jets of stones, melted lava and scorix thrown up to great heights, and frequently falling in parabolic curves at distances of six and eight miles, and currents of melted rock, flowing over the edge of the crater, or bursting forth from fissures in the cone. Mr. Mallet's researches show that earthquakes are not deep-seated. In the Neapolitan regions, the concussions producing them appear to occur at about eight miles depth, at which the earth's temperature, if presumed to increase in the ordinary proportion, would only be 883.6° F., less than half that of flowing lava. It would seem that in regions of volcanic activity, there is a constant supply of molten matter, ready to rush up through craters or fissures as soon as sufficient pressure is applied; and it is an interesting question whether these lava reservoirs are connected with a general mass of melted matter below the solid crust of the earth, or whether they are local stores, owing their high temperature to local conditions, and not directly deriving it from central heat.

The source of lava floods may be much deeper than that of earthquakes, without any connection with a supposed central incandescent and molten mass. Some years ago, Mr. Hopkins showed that if the interior of the globe was

quite fluid from heat, the earth's crust must be at least 600 or 800 miles thick; but recently M. Delaunay has objected that the molten lava may be much more viscous than a true liquid. Professor Phillips remarks, that the interior fluid can only be of the nature of lava, which, when examined at the surface, flows like thick honey, and to such a fluid Mr. Hopkins's reasoning does not apply. But at enormous depths the heat may be sufficient to produce really fluid lava without viscosity. The earth crust cannot be supposed of uniform thickness, like the walls of a bottle. Probably, it is extremely irregular, and a deep-seated, or central molten mass, if such exists, may communicate by channels, often irregular and narrow, with reservoirs of molten rock at higher levels. Under such circumstances, "convection" of heat would be very irregular, and our globe might contain molten matter, varying from simple fluidity to viscosity and pastiness. The central heat may set up chemical actions in various localities not far removed from the surface, and those actions may, as in laboratory experiments, develop more heat, and melt rocks in their vicinity without any further aid from central fire than that which sufficed to bring the chemical force into play.

Chemical theories of volcanoes should not be abandoned too hastily. They may require modification as science advances, and the particular views of Davy or Daubeny may not be sustainable, but it does not seem prudent to have recourse to central fire and primitive unconsolidated terrestrial matter while the real condition of the earth's interior is so little understood. We quite agree with Professor Phillips that a complete theory of volcanoes should contain account of the consolidation of matter, and be in harmony with the general history of the cosmos; but we doubt whether he is entitled to say that the fluidity of silicated matter, and so forth, poured out by volcanoes is due to the "inherent heat of the globe." It may be so, but it is not *proved* by Fouqué, or by any one else. Many lunar craters have the appearance of being hardened when the crust of our satellite was in a pasty state, and when it was much nearer the earlier stages of consolidation than any known portion of our

earth, as at present existing. If we assume that the earth and moon passed from the nebulous or gaseous to the fluid state, and then gradually formed a solid crust, early volcanic eruptions would consist in outbursts of the central fluid through the thin walls of that crust while it was pasty, or as soon as it became solid; but if the cooling process went on until the crust was so thick that no lava could be forced up from the central molten mass, does it follow that eruptions would cease? Yes, according to Professor Phillips's views, but not so if we admit that chemical actions give rise to local fusions.

When great reservoirs of molten matter exist, the incursion of water from the sea through fissures or rocks would seem sufficient to account for earthquakes, and for the pressure necessary to elevate large columns of lava, and cause their overflow.

Among the numerous interesting questions which Professor Phillips treats in the work before us is that of the earth's contraction by gradual cooling. This cooling would necessarily take place very irregularly, and the contraction resulting from it may lead to great displacements of particular areas least able to resist the disturbing force. The crystallization of rocks also leads to powerful expansions, and Professor Phillips considers that the elevation of the Scandinavian coasts noticed by Lyell could be accounted for by the formation below it of less than fourteen feet of granite in one hundred years. He says, "to me it appears clear that on the general fact of a cooling globe, two great systems of movement in the earth's crust are surely to be inferred: one downward, by reason of the determining of a general contraction to particular axes and centres; the other upward, arising from the crystallization of rocks whose specific gravity is less than the whole mass." Such movements, extending over large areas, would account for many of the modifications of surface we can trace.

We have not attempted to follow the learned author through the interesting details he has so skilfully compressed into one small volume. What we have said will lead our readers to it, and they will infallibly assign to it a high rank amongst the scientific works of our time.

Intellectual Observer.

A NEW THEORY OF THE UNIVERSE.

BY R. A. PROCTOR, B.A., F.R.A.S.

PART III.

IN dealing with the accepted views respecting the sidereal and nebular systems, I have treated the two systems separately. In fact, according to the received opinions—whether we take the theory of those who look upon all nebulae as “island-universes,” or that of those who consider that some few are to be excepted—the sidereal system is but a member of the nebular system. Just as the Sun is one among the stars, so the Milky Way is held to be one among the nebulae.

In presenting the views I have been led to entertain respecting the constitution of the universe, I shall consider the two systems together—for this reason, simply, that I believe them to form but one system.

I would not be understood to assert that all the nebulae lie within the confines of the Milky Way. There may be some few which really are external systems. For instance, I think it not improbable that the spiral nebulae are galaxies resembling our own. But that the majority of the nebulae, and especially such objects as the great star-cluster in Hercules, are to be looked upon as external universes, I am disposed wholly to deny.

I think, indeed, that I should be able at once to show the extreme improbability that even such an object as the Andromeda nebula is an external universe on the assumption that the accepted view of the sidereal system is the true one. Let us consider. In the Milky Way we are supposed to have an aggregation of suns separated from each other—throughout the whole extent of the galaxy—by distances comparable with the distance which separates our Sun from the nearest fixed stars. But so widely are the outer parts of the Milky Way separated from us, that—though composed in this manner—they appear even in our most powerful telescopes as mere patches of filmy light. Nay, there are streams of light so faint, that, in the clear skies of the southern hemisphere, and examined by such an observ-

er as Sir John Herschel, with a reflector eighteen inches in aperture, they appear but as a scarcely perceptible stippling or mottling of the telescopic field of view, and that, to quote Sir John's own words, “the idea of illusion has continually arisen subsequently.” Now what the distance of these streams from us may be, we cannot say; nor is it important for my present purpose that we should be able to form any estimate on this point. It is sufficient to notice that this distance—whatever it may be—must be looked upon as certainly not greater than the radius of the great disc formed by the sidereal system. Such a disc would have to be removed to a distance many times exceeding its own diameter before it would present the dimensions of the Andromeda nebula, or of the largest globular clusters. Now, if the outer parts of the sidereal disc, removed from us by only the radius of the disc, present so faint an appearance to us as has been described above, how inconceivable would be the faintness of the whole disc when removed to a distance exceeding its own diameter many hundreds of times. It would not only not be resolvable into discrete stars by any telescope yet constructed, but it would be absolutely invisible in a telescope exceeding the Parsonstown reflector a hundred-fold in power.

I do not lay any stress on the above reasoning, founded as it is on suppositions which I am not disposed to admit. But imperfect as it is, it forces us to accept one of two conclusions, both of which are diametrically opposed to received opinions. We must either admit that the outer parts of our galaxy differ wholly in constitution from the parts which lie in our neighborhood, or we must deny that the assumed external clusters bear the slightest resemblance to our own sidereal system.

I turn, however, to the examination of the stellar and nebular systems on principles more closely according with observed appearances.

We have seen that the elder Herschel

was mistaken in supposing that the system of nebulae forms a zone resembling the Milky Way, but nearly at right angles to its course. Had this been the case, a negative argument of some force might have been deduced in favor of the absolute independence of the stellar and nebular systems. For it is clear that if nebulae really form a system of island-universes, and our galaxy be but a member of this system, it would be antecedently improbable that the apparent distribution of nebulae should exhibit any correspondence whatever with the apparent distribution of stars. To take a perfectly parallel case:—The Sun is undoubtedly a member of the sidereal system, and we see that there is no correspondence, nor any approach to correspondence, between the position of the Milky Way (or the apparent zone of stellar aggregation) and the position of that medial plane near which all the members of the solar system are observed to travel. If there *had* been any correspondence of this sort, it must have been looked upon either as a very singular coincidence, or as evidence of some law of association, into the nature of which astronomers would have set themselves to inquire. Now I can see no reason for anticipating that any association should exist between the position of a system of universes, and the position of the galactic disc which is assumed to be a member of that system: nay, I can assert with absolute certainty (on the assumption implied) that no such association *necessarily* exists—since the spiral and elliptic nebulae, which, by the assumption, are members of this system of universes, exhibit every variety of position. Therefore, had there been any correspondence of the kind conceived—that is, had there been a zone of nebulae nearly coincident in position with the zone of the Milky Way—we should have had no other resource but to explain that correspondence as the effect of a very singular coincidence—unless we gave up the theory that the nebulae do, indeed, form a system of universes whereof the galaxy is but a member.

Now I have been particular in dwelling on this point, because the discovery that Herschel had been mistaken as to the existence of a zone of nebulae, brought with it a remarkable result. We have seen that the central region of the north-

ern cluster of nebulae lies very near the pole of the Milky Way—so near, indeed, that the younger Herschel places this coincidence of position amongst the phenomena which any one who attempts to give a consistent theory of the nebular system must account for. We see, then, that there *is* a coincidence, not precisely of the kind contemplated in the preceding paragraph, but marked enough in its character. And we see also that Sir John Herschel—apparently without noticing the important conclusion to which his words tend—points out that we cannot reasonably ascribe this coincidence to the effects of chance-distribution, but must assign a cause for it. If Herschel is right, if accident is *not* a legitimate explanation of this coincidence, then, as it seems to me, we can adopt no other conclusion than this—that nebulae do not form a system of external universes, but are intimately associated with the sidereal system.

But we have seen* that there exists in reality an association between the apparent distribution of nebulae and stars, which is much more remarkable than the one pointed out by Sir John Herschel. For, along that very zone of the heavens which is occupied by the Milky Way, there is marked *absence* of nebulae. If we except certain star-clusters, which exhibit so singular a relation to the Milky Way that Sir John Herschel considers they must belong to it, we shall find that of 6000 and more nebulae which have been discovered by astronomers, there are scarcely fifty which lie on a zone occupying a full tenth part of the celestial sphere. It will be remembered also that the direction of the central line of this zone is not exactly coincident with that of the Milky Way, but lies more nearly along that great circle through Orion, Perseus, Cygnus, Lyra, etc., near to which so large a proportion of the more brilliant stars are found collected.

Now, the existence of a zone in which nebulae are markedly wanting is a much more remarkable phenomenon than the existence of a zone very rich in nebulae would have been. We see, for instance, that the existence of the Milky Way among the stars is very easily accounted

* See "Notes on Nebulae" in THE STUDENT for March, 1868.

for by the supposition that the sidereal system forms a species of disc. But if there were a zone wanting in stars, how should we have explained so strange a phenomenon? It is clear that we should either have to assume the existence of *two* sidereal systems, between which our sun was situate; or else to adopt the almost equally *bizarre* theory that the stars formed a cylindrical system, very long in comparison with its thickness, so that from the neighborhood of the sun—placed somewhere near the axis of the system—very few stars could be seen in directions at right angles to that axis. And, if the zone were very distinct, as is the case with the zone free from nebulae, the former hypothesis would alone be available.

It results, then, that if nebulae really belong to external space, they must form two systems, our own galaxy occupying a place between the two. Improbable as this conclusion appears, we cannot escape from it, nor from this further improbability, that the sidereal disc should have a position almost exactly at right angles to the line joining the central parts of the two nebular systems—*unless we concede that the nebulae belong, for the most part, to our galactic system.* Nor does there seem any comparison between the difficulties involved in the latter view and the utter improbability of either of the two former assumptions.

But again, let us recall the results of the discussion respecting the extinction of light. We saw that there is good reason for rejecting the theory that light suffers appreciable extinction within the limits of our galaxy. It will be well, however, before proceeding further, to notice that the theory thus rejected is not only not unfavorable to the views I am seeking to maintain, but leads directly to their establishment. For if we assume with Struve that the outer parts of the Milky Way are hidden from our view, even with Herschel's eighteen-inch reflector, through the effects of extinction, then, *à fortiori*, all outer systems must be hidden from us, unless their component stars exceed the brightest members of our system many thousand-fold in splendor. We see, then, that the theory of extinction at once excludes all belief that the nebulae are external sidereal systems rembling or in any sense comparable with our own.

Now it has been assumed, somewhat too hastily I think, that the only available explanation of the difficulties which induced Struve to accept the theory of the extinction of light, lies in the supposition that the stars composing the sidereal system are much less densely strewn round its border than in the neighborhood of the Sun. It appears to me that, although in all probability there is a gradual diminution in the density of stellar aggregation as the distance from the centre of the galaxy increases, yet it is highly probable that the outer stars are inferior also in magnitude and splendor*—and perhaps in a much more marked degree. To me, indeed, the evidence in favor of such inferiority appears altogether irresistible.

In the first place, let us consider the naked-eye aspect of the Via Lactea. Is it such as would be presented if the sidereal system really has the figure assigned to it by Sir Wm. Herschel? I am not here discussing the first assumption made by Herschel,—that there exists a certain approach to uniformity in the distribution of stars throughout the galaxy. He was the first to admit that this idea must be abandoned. But it appears to me that Herschel's estimate of the irregularity of our galaxy fell far short of the reality. The sidereal system must be looked upon as composed of streams and sprays and clusters of stars aggregated together without any discoverable laws. The appearance of the Milky Way to the naked eye strongly suggests a constitution of this sort. It is commonly asserted that the galaxy forms a continuous ring of light upon the heavens. But this is not the case. Near Argo, the main stream is divided, across one of its widest and most brilliant portions, by a dark rift of considerable extent. The narrower stream which runs side by side with a portion of the main stream of the Milky-Way is also discontinuous; again, the ga-

*Sir John Herschel speaks of certain stars seen in parts of the galaxy as appearing small, "not by reason of excessive distance, but of a real inferiority in size or brightness." But he is not here supporting the theory we have mentioned above. I am speaking of the inferiority of the outer stars on the average, as compared with the average of stars near the centre of the galaxy; Herschel is speaking of the inferiority of certain members of the outer parts of the galaxy as compared with their neighbors.

laxy is marked in some places with *lacunæ* and in others with sudden accessions of splendor—phenomena which appear inexplicable unless we assume an irregularity, not merely in the distribution of the stars, but in the form and structure of the sidereal disc.

But this is not all. Even on the assumption of extreme irregularity, there still remain insurmountable objections to the supposition that the Milky Way has the figure of a disc. It will be remembered that there exists in the southern hemisphere, close by the Southern Cross, a strange, roughly circular—or more correctly a pear-shaped vacancy, so conspicuous that it has obtained among sailors the name of the *Coalsack*. It is very difficult to reconcile the existence of a gap of this figure with the imagined longitudinal extension of the galactic system. And it is equally difficult to account for the phenomena described in the following passage of Herschel's "Astronomy":—"From the neighborhood of Eta Argus the Milky Way "crosses the hind feet of the Centaur, forming a curious and *sharply defined* semicircular concavity of small radius, and enters the Cross by a *very bright neck or isthmus* of no more than 3 or 4 degrees in breadth, being the narrowest portion of the Milky Way. After this it *immediately expands* into a broad and bright mass." Still more remarkable and significant is the fact that the Coalsack lies "in the midst of this bright mass." All these phenomena point to the conclusion that the Milky Way, in this neighborhood at any rate, is really what it appears to be—a belt or zone of stars, separated from us by a comparatively starless interval. An irregular belt of this sort might present the varieties of form indicated above, and might be transpierced by an aperture of any figure; but it is utterly inconceivable that a disc-like space, irregularly occupied with streams and clusters of stars, should be so transpierced as to exhibit a circular vacancy to an eye placed near its centre.

In the conclusions just deduced I am in agreement with Sir John Herschel, who, indeed, says in one place that the galaxy, looked at according to a certain view, would "come to be considered as a flat ring." But he nowhere adopts the consequences to which, as it seems to me, this view of the subject should have led

him. In the interpretation of another phenomenon presented by the Milky Way, I am wholly at issue with him. He says, "we cannot, without obvious improbability, refuse to admit that the long lateral off-sets which at so many places quit the main stream and run out to great distances, are either planes seen edgewise, or the convexities of curved surfaces viewed tangentially, rather than cylindrical or columnar excrescences bristling up obliquely from the general level." To me the obvious improbability seems to lie altogether the other way. That *one* plane or curved surface should happen to be seen edgewise, so as to resemble a long and narrow lateral offset, is sufficiently unlikely; that several should so appear is utterly improbable. The obvious improbability conceived by Herschel appears to be founded on the "oblique bristling up" of cylindrical star sprays. But the evidence we have already had of the extremely irregular and heterogeneous conformation of the Milky Way is sufficient to remove any difficulty of this sort. Indeed, even among the stars in our immediate neighborhood, there exist, as I have pointed out elsewhere,* decisive evidences of stream-formation. The star-streams visible to the naked eye are far too marked to be the result of chance-distribution; and I anticipate confidently that the examination of the proper motion of all the stars composing any stream will suffice to show how intimately they are associated together.

Now it might seem, at first sight, that the phenomena I have adduced in the preceding paragraphs, afford no evidence in favor of the opinion that the more distant portions of the galaxy are composed of stars inferior in brilliancy to those which lie in the neighborhood of the solar system. But there is another phenomenon which, when properly understood, seems to make this opinion the direct corollary of the views resulting from the former phenomena:—

It appears to me that if we consider the enormous distance at which the Milky Way must lie beyond the lucid stars, on the hypothesis that it is composed of orbs nearly equalling them in

* "Notes on Star-streams," in "Intellectual Observer" for August, 1867.

brilliancy, we cannot but contemplate with amazement the singular correspondence which may be traced between the configuration of the Milky Way and the arrangement of the brilliant fixed stars in its neighborhood. There is scarcely a part of the Milky Way in which there is not some evidence, more or less marked, of a much more intimate association between the lucid stars and the clustering orbs which constitute the galaxy, than could be reasonably looked for as the result of chance-distribution. Consider, for instance, that bright light cloud between the brilliants which form the noble cross in Cygnus; and the equally marked galactic clustering near Aquila: and note that this arrangement becomes the more significant when we remark that the two clusters lie on different streams of the Milky Way, which is double in this part of its course. Well worth noticing also is the conformation of the galaxy where it traverses the festoon of Perseus. But in the southern hemisphere there is a much more marked agreement between the *Via Lactea* and the lucid orbs. It cannot be merely the result of accident that the double curve of bright stars which forms the body and tail of Scorpio, should so closely follow a most complicated portion of the Milky Way, that not one of those stars should fall on a part of the heavens free from milky light. Nor can it be accidental that the numerous turns and windings of the Milky Way from Antares to Sirius should seem in every case to be the result of attractive influences exerted by the leading stars in its neighborhood, inasmuch that there is not a single star of the first four magnitudes on any of the numerous lacunæ which appear in this portion of the Milky Way.*

If we accept the evidence afforded by this peculiarity, we must suppose that the streams of stars composing the Milky Way are very much nearer to us than they have been assumed to be, and therefore that they are composed of stars far inferior in brightness, and also much more closely compacted, than those in the neighborhood of the solar system.

The evidence afforded by the telescopic aspect of the galaxy strikingly con-

firms this conclusion. I shall mention two phenomena alone, as space will not permit me to deal with this part of my subject at any great length. The first is a peculiarity which is utterly inexplicable by the views ordinarily held—the fact, namely, that in several instances the Milky Way is observed to commence quite suddenly, so that one half of the telescopic field of view will be occupied with nebulous light or with closely aggregated stars, while the other will be perfectly black—the line of demarcation between the two portions being well defined. The second phenomenon to which I wish to call attention is yet more significant. In some instances,* there is seen in the field of view a sharply defined projection from the Milky Way, the apex of the projection being occupied by a lucid star. That such an association should be looked on as accidental is more than I can believe.

Corresponding to the association between the Milky Way and lucid stars is a phenomenon which falls here to be considered. The irregular nebulae are objects differing altogether in character from all other nebulae. They cover a far larger space on the celestial vault, even if we assume that their discovered dimensions afford any but the roughest indication of their real extent. In reality, however, since each increase of telescopic power increases the apparent dimensions of these objects, we probably fall far short of the truth in making such an assumption. Now, as we have seen (see "Notes on Nebulae" in the *STUDENT* for March, 1868), these irregular nebulae are associated in the most singular manner with fixed stars in the same field of view. The wisps and sprays of nebulous light which stream from the central convolutions of such nebulae, correspond, quite closely in many instances, with streams of small fixed stars. In many of these nebulae, also, there are streams of faint nebulosity extending towards fixed stars, and acquiring a sudden brightness around them. Now it seems

* See the maps of the Milky Way in the "Intellectual Observer" for August, 1867.

* I write from memory, not having by me the work in which these phenomena are recorded—Herschel's "Results of Observation at the Cape of Good Hope." My impression is that he mentions several such instances; one very remarkable case he certainly mentions and illustrates with a figure.

to me that we cannot, without utter improbability, consider such an arrangement as accidental. For instance, if the bright stars ϵ and ι Orionis were wholly disconnected with the great nebula in Orion, how enormous would be the antecedent improbability that these orbs should appear—as they do—involving in strong nebulosity, connected by streams of faint nebulosity with the great nebula. And, even if we assumed this to be possibly due to the effects of chance-distribution, how should we explain the fact that similar phenomena are observed in the other irregular nebulae, and notably in that mysterious object which surrounds Eta Argus, the most remarkable variable in the heavens.

Then, also, there is the significant fact that all the irregular nebulae fall on that very zone which is freest from ordinary nebulae.* And the only one which, though falling on this zone, does not actually fall on the Milky Way, is the Orion nebula. This last fact seems even more significant than the general associations of the irregular nebulae with the Milky Way. For it seems to exhibit the brilliant array of stars in Canis Major and Orion, with which the Orion nebula is associated (*and around certain members of which it actually clings*), as in reality far more intimately associated with the neighboring stream of the Milky Way than the ordinarily accepted views would allow us to suppose.

I pass over the association often observable between those remarkable objects the double nebulae and double stars, though the phenomenon is sufficiently significant. But there is one other well-established phenomenon which deserves attentive consideration. Nebulae have

been observed to vary in light, or even to disappear. Hind, d'Arrest, and Schmidt record many such instances. Are we to suppose that whole galaxies of suns have suffered in this manner total or partial extinction? Such a supposition is absolutely incredible. Nor can I look on the alternative that some opaque or semi-opaque substance has intervened between us and these objects as having any reasonable claim to acceptance.

The phenomena I have been discussing seem to point to conclusions very different from those which have been usually accepted respecting the visible universe. Instead of separating the stars and nebulae into distinct systems, or, rather, of looking on the stellar system as a member of the system of nebulae, we seem compelled to look on almost every object, visible even in the most powerful telescope, as a portion of one system, which comprises within its range single, multiple, and clustering stars, irresolvable nebulae, gaseous bodies of symmetrical and unsymmetrical figure, and, in all probability, myriads of other forms of matter as yet undetected. It would be rash indeed to attempt to speculate on the processes by which the visible universe has attained its present figure. But I may venture so far as to point to the evidences which seem afforded of processes of aggregation, leading—according to the position, and, perhaps, of the character, of the masses acted upon—to the formation of suns of greater or less splendor and magnitude, of streams and clusters of small stars, and of systems in which suns and stellar streams and clusters seem to be intermingled. These processes seem to have led to an annular or spiral, rather than to a disc-shaped galaxy; but large portions of the matter, originally distributed perhaps with comparative uniformity, appear to have escaped the influence of these processes. Either because they have been subjected to counteracting attractions, or through the influence of the same principle which makes the centrifugal force near the poles of a rotating globe less than that at the globe's equator, this portion of the universe seems to have been free to form aggregations in regions which lie near to what may be called the polar axis of the galaxy. Nor need we wonder that these aggregations should differ very

* There is a notable exception to this law in the singular nebula 30 Doradus, which occurs within the greater Magellanic Cloud. This exception is more significant, if possible, than the law itself, as will appear farther on. It is rather singular that Sir John Herschel should speak of 30 Doradus as "unique even in the system to which it belongs," as if it differed yet more markedly from objects not belonging to the Nubeculae, whereas, so far as one can judge from his own description and pictures, this nebula presents a striking resemblance (in its general character) to that which surrounds the star Eta Argus. In each there is a mass of irregular nebulosity surrounding a central condensation, within which is a well-defined opening free from nebulous light: and the brightest star within the confines of each nebula occurs on the brightest part of the nebula and close to the vacancy.

much in character from those which prevail within the galactic annulus, nor that within the former alone true nebulae should be found profusely distributed.

The only irregular nebula which has been examined with the spectroscope—the great Orion nebula—shines with light whose source is mainly, if not wholly, gaseous. Lord Rosse states that the stars visible in the nebula, when examined with his giant reflector, appear as red points of light upon a bluish-green back-ground of nebulous light; and it is possible, or rather probable, that these points of light proceed from bodies which are not gaseous. But, however this may be, it is quite clear that there is in the Orion nebula an enormous amount of gaseous matter, forming (it would seem) a connected but irregular system, within which are involved many fixed stars, and notably the second magnitude star ϵ Orionis, and the third magnitude star ι Orionis. It seems fairly presumable that the other irregular nebulae consist in like manner of enormous aggregations of the same luminous gas. The annular and planetary nebulae appear to be, without exception, gaseous masses. Now, we have seen that all the irregular nebulae lie within, or close to, the Milky Way. The same is the case with the annular nebulae, and by far the larger number of the planetary nebulae.* The Dumb-bell nebula, one of the most remarkable gaseous nebulae in the heavens, also lies on the Milky Way. We see, then, that the gaseous masses revealed to us by the telescope show a marked tendency to aggregate along the galactic zone. *Why* this should be the case, it would not be easy—in the present state of our knowledge—to determine; but it is clearly not a phenomenon which need surprise us when once we have accepted the conclusion that stars and nebulae form but a single system. I do not consider that, in extra-galactic space, the luminous gas which constitutes the common material of all the gaseous nebulae (for the spectroscope reveals no variety in this respect†) is in reality wanting. It

probably exists, but in a more dispersed form than in the galaxy. It is not a little remarkable that the only comets yet examined with the spectroscope exhibit (as respects the light from the nucleus) the same three lines of light which form the spectrum of the gaseous nebulae. Is it not possible that, around some stars or systems of stars, comets are much more thickly congregated than around our own sun; and that, in places, there may even exist systems of comets free from stellar influences? If we suppose the irregular nebulae to result from the former arrangement, the annular and planetary nebulae from the latter, we should be able to understand the permanence of the apparent figures of these objects, since the slow motions of comets in the enormous orbits indicated by our hypothesis would not be appreciable even in hundreds of years.

I cannot but think that there is some significance in the circumstance that so many temporary stars* have made their appearance “in or close upon the borders of the Milky Way, and,” as the younger Herschel says, “only within the following semicircle, the preceding semicircle having offered no example of the kind.” May there not be a connection between this peculiarity and the circumstance that so many of the more remarkable variables lie near the Milky Way? I have already noted the association of Eta Argus with a large irregular nebula. Betelgeux, in the neighborhood of the Orion nebula, is another remarkable variable. Near the nebular region of Cygnus there are also several variable stars.

The Magellanic Clouds remain to be briefly considered. Two arguments have been made use of to show that these mysterious objects are not con-

having one bright line; others give a three-lined spectrum; and there is one nebula the spectrum of which consists of four lines. But it is presumable that these variations result only from variations in the intensity of the light of these nebulae, since the bright lines occupy always the same position.

* Sir John Herschel says “all, without exception;” but, since this was written, the temporary star, which appeared in Corona in May, 1866, has formed an exception to the rule we have referred to. It is probable that so-called temporary stars are in reality merely variables of long period and fitful variability.

* Of thirty-four planetary nebulae recorded in the “General Catalogue,” no less than twenty-one lie within 15° of the great circle centrally dividing the Via Lactea.

† Some of the gaseous nebulae give a spectrum

needed with the galactic system:—First, they contain forms of nebulae not met with within the Milky Way; and, secondly, there are no traces of any streams of nebulous light leading from the Milky Way towards the Nubeculae. The former argument presents no difficulty. It is, indeed, rather a confirmation of our views that they afford an easy explanation of what had been held to be a scarcely explicable phenomenon. That the processes of aggregation in portions of space not falling within the galactic annulus, should, in certain regions, lead to the exhibition of forms seen within that region, can hardly be considered very wonderful. But, in connection with the second argument, there is a circumstance which deserves to be carefully attended to. Herschel dwells forcibly on the exceeding barrenness of the regions which immediately surround the Nubeculae. "The access to the Nubecula Minor on all sides is through a desert," he says, in one place; and, among his notes on this district, we find such expressions as "a miserably poor and barren region;" "a region of utter barrenness;" and so on. Now, this peculiarity, so far from confirming Herschel's opinion that the Nubeculae are disconnected with the sidereal system, is directly opposed to it. One can understand the phenomenon, if one looks on the Nubeculae as aggregations formed within regions of space belonging to the sidereal system—one would almost expect that the neighborhood of such regions should be deficient in splendor

—*drained of stars*, so to speak. But if the Nubeculae were really distinct systems far beyond the sidereal system, there could be no reason for expecting that their neighborhood should be more barren than other portions of the sky—still less that it should be *oppressively barren*. May we not go farther, and say that there is no way of accounting for so remarkable a phenomenon, save on some such hypothesis as we have presented?

But this is not all. It has been well remarked by Sir John Herschel, that the two Nubeculae are so nearly circular as to render the assumption that they are otherwise than globular in figure utterly improbable. It follows, therefore, that the farthest part of either globe is not much farther off proportionately than the nearest part. Hence the Nubeculae show us that "stars of the seventh and eighth magnitude and irresolvable nebulae may coexist within limits of distance not differing more in proportion than as nine to ten." Surely this circumstance is of greater force than Sir John Herschel seems to assume. He says that "it must inspire some degree of caution in accepting *as certain*" the views ordinarily held respecting stars and nebulae. To me the fact that stars and irresolvable nebulae appear intermixed in the Nubeculae seems to afford decisive evidence of the justice of the views which I have been induced to accept on other grounds. In the face of such evidence, the old theories respecting the universe seem to become wholly untenable.

St. Paul's.

THE LIFE OF A SCOTCH METAPHYSICIAN.*

SIR WILLIAM HAMILTON was a man of whom Scotland has every reason to be justly proud. But for him, she, and indeed Britain, would have been barren of deep philosophical speculation, probably

even of much philosophical interest, at a time when on the Continent great and earnest men were actively engaged in its researches. Thus Sir William Hamilton was remarkable inasmuch as he revived the study of philosophy proper in these islands; but his character was such that, living at any time, he would have made an impress upon the thought of the day. His love of philosophy was unbounded in its enthusiasm and untiring in its energy, while his original speculative genius was strikingly great. But even to put these aside, his almost superhuman learning, and

* "Memoir of Sir William Hamilton, Bart., Professor of Logic and Metaphysics in the University of Edinburgh. By John Veitch, M.A., Professor of Logic and Rhetoric in the University of Glasgow. William Blackwood and Sons, Edinburgh and London: 1869.

"Edinburgh Essays." By Members of the University, 1856. Edinburgh: Adam and Charles Black. Essay VII.—"Sir William Hamilton." By Thomas Spencer Baynes, LL.B.

the rare elevation and beauty of his character, were such as at any time to command admiration and to compel respect. The present memoir, which has been eagerly anticipated for some time, will be read with much interest, even by those who have hitherto known the philosopher and his works only by name. Professor Veitch has done his work with great care, with a painstaking elaboration and combination of the materials at his command, and with a genuine love and admiration of the man he is writing about. The biographer has not always, however, shown himself a very graceful or skilful artist. His materials, if ever carelessly, are sometimes awkwardly put together, and once or twice, when meaning to be pathetic, he has only succeeded in being clumsy.

Hamilton had almost a right to be a Scotch Professor. His grandfather, on the death of an elder brother, was appointed to the Chair of Anatomy in the University of Glasgow, and on his death was succeeded by Sir William's father. His grandmother was a daughter of a professor of Church history in the same university, and he himself was born in a house within the college walls, on the 8th of March, 1788. There appears to have existed in Glasgow during the lifetime of the grandfather a quaint and genial circle of men, representatives both of the academic and commercial interests of the city. For the sake of good fellowship, and with the desire to cultivate and give scope to their literary propensities, they formed themselves into clubs. Sir William's grandfather, Dr. Thomas Hamilton, was a prominent member of two of these,—the Anderston and the Hodge Podge. The Anderston, founded by Simson, the famous restorer of ancient geometry, was the oldest and most distinguished of all the clubs in Glasgow, and used to meet in a hostelry in what was then a suburban village. The proceedings were commenced by a dinner at two o'clock, when, remembering some of the celebrities who belonged to it, Professor Veitch concludes, that "the banquet of hen broth was no doubt well-seasoned by Attic salt." The Hodge Podge seems to have been of a somewhat less classical type than the Anderston, if we are to judge from the description of it given in some doggerel verses by its Laureate, Dr. John More :

"A club of choice fellows each fortnight employed

An evening in laughter, good humour, and joy ;
Like the National Council, they often debate,
And settle the Army, the Navy, the State."

Further on in the effusion, and in the same strain of pleasantry, he refers to Dr. Thomas Hamilton : —

"He who leads up the van is stout Thomas the tall,
Who can make us all laugh, though he laughs
at us all ;

But entre nous, Tom, you, and I, if you please,
Must take care not to laugh ourselves out of
our fees."

Sir William's own father, inheriting the amiability and humor of "stout Thomas the tall," died young, before he had completed his thirty-second year, leaving to the care of his young widow two sons,—William, the subject of this paper, and Thomas, who became the brilliant author of "Cyril Thornton," and other works. On Mrs. Hamilton devolved all the arduous duty of education. She was quite equal to the task, being a woman with considerable strength of character, with a vein of sternness, almost harshness, mingling with her mother's nature. When quite a child, we find that love for the marvellous and romantic, which in after years in his hours of relaxation used to make Hamilton read the "Arabian Nights," "Frankenstein," and the works of such an authoress as Mrs. Radcliffe, displayed in his love for the graphic illustrations to the "Pilgrim's Progress" and the "Apocalypse," and, subsequently, the "Ancient History" of Rollin, and the "Natural History" of Buffon. When a boy, more given to active out-door exercise and to sports of all kinds, in which he always excelled, than to precocious book-learning. Still, although his almost superabundant amount of vital energy found its readiest outlet in such a way, he must have expended much of it on his studies, as we find him attending the junior Latin and Greek classes at the University at the early age of twelve. Much to his indignation, and much against his youthful sense of dignity, he was, however, removed from the University, and was sent to study under Dr. Dean, at Bromley, in 1801, where he made rapid progress, and was distinguished for his love of languages. In letters to his mother, from Bromley, we have interspersed with accounts of his school work anxious

inquiries as to the quantity of fruit in the orchard at Rindmuir, as to where he was to spend his holidays, and as to the possibility of half-a-guinea being forthcoming from the maternal purse, to purchase a box to put books and "things" into. Two years later he returned to Scotland, and re-entered the University of Glasgow, where he soon began a career of brilliant success, and where he had for a close companion Michael Scott, the author of "Tom Cringle's Log," &c. Most of his spare time and the college vacations, which in Scotland are long, were spent at the Manse of Midcalder, at the foot of the Pentland Hills, under the healthy instruction and care of the Rev. Dr. Sommers; and here it was he began his first essays in philosophy. But not as a hard student, or as a young philosopher, was he remembered in the village of Midcalder, but rather as a "wild boy and full of sport," a great hand at swimming and leaping, the life and soul of all the healthy activity and enjoyment of the place,—a king among boys.

When about seventeen years of age he began to pay particular attention to the study of medicine,—a study which afterwards was of great use to him in investigating the relations that exist between Psychology and Physiology. For the medical profession, indeed, he appears to have been destined for some years, no less by the wishes of his friends than by his own inclinations, and for the purpose of following up his studies in that direction, he spent the winter 1806-7 in Edinburgh. Here the passion, which had first shown itself when a student of Glasgow, of collecting rare and old books and editions,—a propensity which was to make him the possessor of one of the noblest libraries ever amassed by an individual collector,—was developed, and to his mother's eyes assumed alarming proportions.

Mrs. Hamilton was anxious that her boy should go to Oxford, and despite many friends, who saw in William Hamilton only a lad of ordinary abilities, her desires were gratified by his entering Balliol College as a Snell Exhibitioner in May, 1807. The impression which his personal appearance, character, and habits of study left on the students with whom he came in contact was very remarkable. The few men who knew him and who now survive, all concur in testi-

fying to the warm feelings of admiration and love which he excited, at once by the manly beauty of his person, his courteous and agreeable manners, the kindness and gentleness of his demeanor, the force of his intellect, and the extraordinary character of his attainments. Amongst those who have left reminiscences of his life at Oxford are Lockhart, whose fast friend he ever was,—till some lamented and unexplained breach occurred in after life,—Mr. J. H. Christie, and Mr. James Traill. Those Oxford days seem to have taken a fast hold upon Lockhart, and when he wrote home Hamilton's name was repeatedly to be found in his letters; and it was Hamilton's tutor, a Mr. Powell, a strange being, who soon found that he was quite as unnecessary to his pupil as he wished his pupil to be to him, whom he made the prototype of Daniel Barton in "Reginald Dalton." From Mr. Traill's reminiscences of the future professor, we glean some account of the boyish sportiveness of his early days, which it is useful and pleasant to record, as we are not in general apt to associate such a thing with the hard reading student and the philosopher in embryo. We read of how the two friends one night strewed crumbs of bread soaked in wine for a mouse, which had crept out during a protracted silence, and how they made the discovery that men and mice were very much the same under the influence of drink; of how they went to forage for provisions late at night in other men's rooms, and how on one occasion they narrowly escaped being brained by the poker of a brother Scot of fiery temperament. Some of the stories related of him are of the nature of practical jokes. One morning he had some men breakfasting with him. The quality of the chocolate was much praised. When it came round to him, he looked rather suspiciously at it, and asked his servant how he made it. The servant replied, "In the usual way; in the large coffee biggin." "You block-head!" said Hamilton, "don't you know that was what I boiled the child's head in yesterday;" an announcement which must have had a strange effect on the party at breakfast, knowing as they did Hamilton's proclivities in anatomical study. One evening with another party in his room, making midnight eerie with relating ghost stories to one another, he

stole unobserved out of the room. In a little while the party was startled by a loud single knock at the door; it opened, and a human skull, shrouded in a white sheet, appeared over the top of the door, gradually rising till it reached the roof of the room, when it stretched out a pair of lean arms over the awestruck group. The apparition was manufactured by Hamilton, with a skull, a table-cloth, a long carpet-broom for a body, and hearth brushes for arms. On another occasion, it is said, with rather a noisy party assembled, a tutor, as was his custom, stole out after the stair-lights were out, and listened at the door. Hamilton knew his habit, and was prepared for him. Suddenly opening the door, he seized the eaves-dropping tutor by the collar, took him to the stair-case, lifted him up, and gave him a good shaking suspended in mid-air. It was pitch dark, and the tutor in terror revealed himself. Hamilton made a well-feigned apology, protesting that it never entered his head that Mr.— could place himself in such a position, and assuring him that he thought it had been some rascally scout.

But these and such other tales were mere episodes in a life now devoted to abstract study, varied reading, and deep research, filled with dreams of ardent intellectual ambition. Here his intellectual character was fairly formed, and here he gave himself up to the fascinations of the study of Aristotle, whom he recognized as the greatest moulder of his thoughts, and as exerting the strongest influence over his intellectual activity. Even in the short period of his undergraduate-ship he became the most learned Aristotelian in Oxford. In the Honors' examination, so singular was the list of books he gave in, that an accurate copy of it was preserved by the examiner; and in fourteen of the books which he took up, in the abstruse subjects of Greek philosophy, he was not questioned, the greater part of them being declared by the examiners too purely metaphysical for public examination. According to the testimony both of Mr. Villers and the Rev. Alexander Nicoll of Balliol, his examination in the department of philosophy stood, and still stands, unrivalled.

On leaving Oxford it was necessary for him to choose his profession. Medicine was inviting. He had good chances of

success in it, from the goodwill of friends and from his own studies; but if he made medicine his mistress he could not continue to coquet with philosophy, as he could do if he embraced the legal profession. So accordingly to the study of law he betakes himself, and in July, 1813, passes for an advocate, and takes up a permanent residence in Edinburgh. His interest in legal matters was also enhanced when making inquiries in regard to his claims to the baronetcy of Preston. The Hamiltons of Airdrie, of which family his father was a cadet, were a branch of the family of the Hamiltons of Preston and Fingalton. There had always been a tradition amongst them that, since the extinction of the direct male line of that ancient house, they were entitled to its honors. On the death of a cousin, young Hamilton became head of the Hamiltons of Airdrie; and finding such an investigation in the line of his legal work, and doubtless inspired by the remembrance of the noble deeds done by that illustrious house—a house which has left its mark on many a page of Scottish history, even back as far as the times of King Robert the Bruce—he set about the work of proving himself the legal heir to its titles and dignities. He was successful in establishing his claim, and henceforth was known as Sir William Hamilton. He was now a regular attendant at the Parliament house, waiting for work, "having his time," he writes, "sadly consumed in pacing these vile Parliament-house boards, nothing to do;" adding characteristically, "which I am not sorry at, in the present state of my legal acquirements." These acquirements, however, were far from being inconsiderable. Indeed, his mind was of such a nature as never to rest satisfied with half attainment; and his legal career could in no wise be said to have been a failure, although perhaps the term brilliant could never be attached to it. His mind always revolted at the details and technicalities necessary to be acquired for a remunerative practice; and his ardent, aspiring intellect was always soaring beyond the dry minutæ and paltry trifles in which some of the most successful men found their delight, and from a knowledge of which they obtained their cases. The Advocates' Library was a much more congenial place of resort, and we

often find him shaking the dust from dingy tomes which had not been handled for years, and burying himself in their contents, utterly forgetful of the agents who would not fee him, and of the reign of a Tory Government which would give a Whig like himself no work; for Sir William, though unobtrusive as a politician, was and continued to be a staunch Whig, though never perhaps a useful one, in the lower and common sense of that term, or a bustling and active partisan.

His mother and her young niece, Miss Janet Marshall, who afterwards became Lady Hamilton, lived with him at this time in Edinburgh, and they were frequently to be found in the circles of Edinburgh society, where Sir William was ever welcome, accompanied as he often was by Lockhart, Wilson, De Quincy, and his brother, Captain Hamilton, now an officer on half pay, given over to the pursuit of literature. De Quincy, before he became personally acquainted with him, thus conveys some idea of what was thought of Hamilton by strangers:—"The extent of his reading was said to be portentous—in fact, frightful—and to some extent even suspicious; so that certain ladies thought him 'no canny.' If arithmetic could demonstrate that all the days of his life, ground down and pulverized into 'wee wee' globules of five or eight minutes each, and strung upon threads, would not furnish a rosary anything like corresponding in its separate beads or counters to the books he was known to have studied and familiarly used, then it became clear that he must have had extra aid in some way or other—must have read by proxy. Now, in that case we all know in what direction a man turns for help, and who it is that he applies to when he wishes, like Dr. Faustus, to read more books than belong to his allowance in this life."

And afterwards he thus speaks of his personal appearance. "There was an air of dignity and massy self-dependence diffused over his deportment, too calm and unaffected to leave a doubt that it exhaled spontaneously from his nature, yet too unassuming to mortify the pretensions of others. Men of genius I had seen before, and men distinguished for their attainments, who shocked everybody, and upon me in particular, nervously susceptible, inflicted horror as well

as distress, by striving restlessly, and almost angrily, for the chief share in conversation. Some I had known who possessed themselves in effect pretty nearly of the whole without being distinctly aware of what they were about. . . . In Sir William, on the other hand, was an apparent carelessness whether he took any conspicuous share or none at all in the conversation. . . . In general my conclusion was that I had rarely seen a person who manifested less of self-esteem under any of the forms by which ordinarily it reveals itself, whether of pride, or vanity, or full-blown arrogance, or heart-chilling reserve."

Sir William, besides mixing in the ordinary society of Edinburgh, saw a good deal of the distinguished foreigners who visited Edinburgh, and his reputation attracted many of them to his mother's house, both before and after his visits to the Continent, which he made for short periods in 1817 and 1820.

In the latter of these years, the Professorship of Moral Philosophy became vacant by the death of Dr. Thomas Brown. The two candidates for the Chair were Mr. John Wilson, known at that time as the author of the "Isle of Palms," and a leading contributor to "Blackwood's Magazine," which had commenced its brilliant career, and Sir William Hamilton, not known as an author, but of great reputation for profound learning and varied reading, as we have seen in our first extract from De Quincy;—in politics,—a thing of more consequence in those days than either authorship or reputation,—a Tory the former, a Whig the latter. The election was in the hands of the Town Council of Edinburgh, composed, as usual, for the most part, of ignorant, narrow-minded men, who then called themselves Tories and now rejoice in the name of Radicals. Each candidate has to support his claims by an array of testimonials. The character of Sir William's must have been very high, for Mr. Cranston, afterwards Lord Corehouse, then at the head of the Scottish bar, is reported to have said of them, "I would rather have failed with such credentials than gained with any others." The Tories in the Council were, however, in a large majority, and Mr. Wilson was elected by a majority of 21 to 11,—a state of matters which, however, we

are glad to record, did not interfere with the warm and close friendship that subsisted between the rivals. Early in the next year the Chair of Civil History became vacant, and it being known that Sir William would be disposed to accept it, the Faculty of Advocates, with whom the appointment virtually lay, elected him to the office by a large majority. The salary attached to the office was miserably inadequate, and the work of the class forming no part of the curriculum for degrees in arts, the attendance of students was very small, having fallen as low as one under a previous professor. Thus the field opened to the new professor was not very promising, or of such a nature as to stimulate him to much exertion. Still Sir William was not the man to let things rest in this state, and he prepared a course of lectures, which were the means of rekindling an interest in the duties of the class, and bringing the number of the students up to about fifty. In the same year as he was elected professor he accepted the first of the many honors he was destined to receive from foreign countries, being made a foreign member of the Society for the Study of the German Language at Berlin. His private reading and study at this time was unbounded, and seems to have embraced a variety of topics, from the poetry of Buchanan and Balde to an investigation of the pretensions of phrenology, then attracting much attention, and the claims of animal magnetism.

Mr. Carlyle, so like Hamilton in his lofty aim, his unswerving energy of purpose, in his love of truth for the truth's sake, saw something of him about this time, and in the course of the valuable and characteristic reminiscences which he furnishes to Professor Veitch's book, he writes:—

"He was finely social and human in these walks or interviews. Honesty, frankness, friendly vivacity, courageous trust in humanity and in you, were charmingly visible. His talk was forcible, copious, discursive, careless rather than otherwise; and on abstruse subjects, I observed, was apt to become embroiled and revelly, much less perspicuous and elucidative than, with a little deliberation, he might have made it. 'The fact is,' he would often say, and then plunging into new circuitous depths and distinctions; again on a new ground, 'the

fact is,' and still again, till what the essential 'fact' might be was not a little obscure to you. He evidently had not been engaged in speaking these things, but only in thinking them for his own behalf, not yours. By lucid questioning you could get lucidity from him on any topic. Nowhere did he give you the least notion of his not understanding the thing himself; but it lay like an unwinnowed threshing-floor, the corn grains, the natural chaff, and somewhat even of the straw unseparated there. This sometimes would befall not only when the meaning itself was delicate or abstruse, but also if several were listening and he doubted whether they could understand. On solid realistic points he was abundantly luminous; promptitude, solid sense, free, flowing intelligibility always the characteristics. The tones of his voice were of themselves attractive, physiognomic of the man: a strong, carelessly melodious, tenor voice, the sound of it betokening tenderness and cheerfulness; occasionally something of slightly remonstrative was in his undertones, indicating well in the background possibilities of virtuous wrath and fire; seldom anything of laughter; of levity never anything; thoroughly a serious, cheerful, sincere, and kindly voice, with looks corresponding. In dialogue, face to face, with one he trusted, his speech, both voice and words, were still more engaging; lucid, free, persuasive, with a bell-like harmony, and from time to time, in the bright eyes, a beaming smile, which was the crown and seal of all to you."

A thoroughly characteristic letter also has been preserved, which Carlyle writes shortly after he had settled in Chelsea, in which he tells him that literature in London seemed dying "of thin diet and flatulence," but not so near dead as he had calculated; and further expresses an intention of actually going to write a book, and perhaps of publishing a booklet already written.

In 1827 Sir William sustained a great loss in the death of his mother, and the two years after this event proved the unhappiest of his life. He felt the horrors of solitude grow upon him daily, and he was for a time utterly prostrate, with no active spirit for his usual occupations. Writing to a friend he says, "Once dining out was the greatest of all

bores; now it is a refuge from the recollection of happy days, and the sad contrast of the present with the past." Two years after this he married his cousin, Miss Marshall, an event which had great influence on his after life and in "moulding the inner nature of the man." She fully supplied his mother's place, and "from the first her devotion to her husband's interest was untiring, and her identification with his work complete." This notice of the husband would fail in honesty and justice without a tribute to the character, patient love, and arduous and faithful energy of the wife.

Sir William up to this time, notwithstanding all his varied reading, thinking, and general acquirements, had as yet given to the world nothing as the result of his labors. It is said that he was far from being a ready writer, not that he could not write rapidly enough under compulsion, but he could not take up the pen at any time, as is the habit with some, and write a certain required amount. Indeed he always appears to have taken the pen in hand with extreme reluctance. However, after his marriage he felt the need of adding to his pecuniary means, and under the very strong pressure and inducements of Professor Macvey Napier, who had just assumed the new editorship of the "Edinburgh Review," he began to contribute to its pages. For his first number, both to draw out Hamilton and to gratify his own tastes, which lay in the way of philosophical speculation, Mr. Napier applied to him for a philosophical article, suggesting as a subject the introductory book of Cousin's "Cours de Philosophie." This paper turned out to be the famous article on the "Philosophy of the Unconditioned,"—the precursor of many a brilliant and subtly-learned article to that review. The great merit of the paper was not early discovered throughout the country; to the general reader it was utterly incomprehensible, and only to one or two of the professed British metaphysicians was it intelligible. On the Continent, however, the review of Cousin was at once recognized as the work of a distinguished and high-trained, speculative intelligence, and of a thinker who had probed not without results some of the deepest truths of philosophy. It was soon in the hands of all the philosophers

of Europe, and was speedily translated into French and Italian. None gave it a more hearty welcome, or recognized more fully the philosophic genius of its author, than M. Cousin himself. Hamilton had been averse at first to writing the paper, because, as he said, "it would behove me to come forward in overt opposition to a certain theory, which, however powerfully advocated, I felt altogether unable to admit, whilst its author, M. Cousin, was a philosopher for whose genius and character I already had the warmest admiration—an admiration which every succeeding year has only augmented, justified, and confirmed." Cousin seems to have taken the paper up in the same fine spirit in which it was written. He was only able for some time to see an extract from it, but was much struck with it. He says in regard to it, that he did not believe there was any individual beyond the Channel capable of interesting himself so deeply in metaphysics, and "I regard this article as an excellent augury for philosophy in England. I am therefore thankful to the author, and wish he knew it." He expresses much anxiety to see the whole of it, and to obtain particulars about its author. After it arrives he declares it a masterpiece,—so excellent, indeed, that he thinks there cannot be fifty people in England capable of understanding it. It was the subject of a long correspondence between the two philosophers, the beginning of a very warm friendship and sincere mutual respect and admiration.

This article was followed shortly afterwards by other important contributions to the philosophy of the country in the form of studies on "Perception," the train of thought involved in which was the natural and logical sequence to the one on the Unconditioned, and on Logic, being a review of recent English treatises on the subject, especially that of Dr. Whately. Like the former article, this last one dealt with the subject in an entirely novel point of view, and turned the thought on the topic in question into an entirely new channel. On every page of it the hand of the Aristotelian student was visible, and he harmoniously develops the thought in the two former papers into a philosophical unity. His other studies were going on at the same time—his physiological studies taking the di-

rection of a series of experiments on his children, the results of which remain recorded in very elaborate tables.

In 1836 the Professorship of Logic and Metaphysics in the University of Edinburgh became vacant through the resignation of Dr. David Ritchie, and it might have been expected that the chair would have been at once given to Sir William, without even a formal application, far less a personal canvass. However, the Town Council of Edinburgh was a unique body, and one singular in all its ways. All the philosophic thought in the land pointed to Sir William as the fittest, and, indeed, only fit, candidate for the Chair; but the Town Council was much above taking notice of speculative opinion, and considered itself far wiser in its own conceit. M. Cousin could not understand the position, and wrote urgent letters from his sick-bed in behalf of his friend. "Sir William Hamilton," he wrote, "is the man who, before all Europe, has, in the 'Edinburgh Review,' defended the Scotch philosophy, and posted himself as its representative. In this relation the different articles which he has written in that journal are of infinite value; and it is not I who ought to solicit Scotland for Sir William Hamilton; it is Scotland herself who ought to honor by her suffrage him who, since Dugald Stewart, is her sole representative. Again, he is, above all, eminent in logic. I would speak here as a philosopher by profession. Be assured that Sir W. Hamilton is the one of all your countrymen who knows Aristotle the best; and were there in all the three kingdoms of his Britannic Majesty a Chair of Logic vacant, do not hesitate to give it to Sir W. Hamilton." Yet, despite this and many other strong and weighty opinions from the philosophers of Europe, the worthy bailies and councillors of Edinburgh were very nearly electing to the Chair of Logic and Metaphysics, "in the interests of pure and undefiled religion"—for Mr. "Here-senter" had been put on the philosopher's track—one Mr. Isaac Taylor! The cause of philosophy in Scotland was only saved by the narrow majority of four!

Sir William Hamilton was now in his true position in the University and in the country. "Grâce à Dieu," writes M. Cousin, "vous êtes nommé; vous voilà à

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votre place et dans votre élément." For the next few years his whole time and attention was devoted to his class. There was the true sphere of all his energy, there he was most at home and exerted the greatest influence for good. He was a born teacher in the highest meaning of the term, born to train and educate youthful intelligence, and to inspire youthful zeal and ardor. From the day of his election he worked incessantly at his subject, and the introductory lecture of the course, delivered on the 21st November, made a profound impression on the large audience assembled to hear it, no less by the depth and subtlety of thought displayed, the evident familiarity with which he handled the most delicate questions, than by the deep, earnest eloquence of his language, the sweet lucidity of his style and wonderful happiness of expression. No one who heard him lecture in the class, his fine face lit up and radiant with enthusiasm, his whole being engrossed in his words, would have imagined that, owing to an aversion to composition, the lecture had been penned the night before, the concluding passages as late as five or six in the morning, by his faithful amanuensis, Lady Hamilton. Sir William wrote the pages roughly and rapidly, and his wife copied them in an adjoining room. Sometimes the subject could not be sufficiently mastered, and Sir William would be found writing as late as nine o'clock, and his weary wife asleep on the sofa, ever wakeful, however, when he appeared with a fresh supply for her to copy. His fame as a lecturer increased year by year, and students were attracted to the class from the continents of Europe, America, and every part of the United Kingdom. It will be interesting to see what a stranger-student saw on his coming up to attend the famous lectures, and the influence they were destined to exert on his everyday life. We cannot convey to our readers a more vivid picture of this than by quoting the words of one who was himself such a student—Professor Baynes, formerly a favorite pupil and assistant of Sir William's, and now an able advocate of the Hamiltonian philosophy as the Professor of Logic and Metaphysics in the University of St. Andrew's. Mr. Baynes contributed a paper on the philosopher to the "Edin-

burgh Essays" of 1856, which is instinct with enthusiasm, and highly vivid and real in its portraiture.

"Sir William's manner," he writes, "naturally struck one on his first entrance by its native dignity, perfect self-possession, and genuine courtesy; but soon the attention was irresistibly attracted to his person. It was impossible, indeed, not to be impressed with the commanding expression of that fine countenance and noble bust; the massive well-proportioned head, square and perfectly developed towards the front; the brow arched, full, and firmly bound together, with short dints of concentrated energy between; the nose pure aquiline, but for its Norman strength; and a mouth beautifully cut, of great firmness and precision, with latent sarcastic power in its decisive curve. But the most striking feature of all to a stranger was Sir William's eye; though not even dark hazel, it appeared, from its rare brilliancy, absolutely black, and expressed, beyond any feature I have ever seen, calm, piercing, sleepless intelligence. It was, in a peculiar degree, the self-authenticating symbol of an intellect that had read the history, traversed the unknown realms, grasped the innermost secrets, and swept with its searching gaze the entire hemisphere of the intelligible world. Though naturally most struck with this at first, one soon found that it but harmonized with the perfect strength and finish of every feature; nothing being weak, nothing undeveloped in any. Whatever the previous expectations of Sir William's appearance might be, they were certainly realized, if not surpassed; and however familiar one might afterwards become with the play of thought and feeling on that noble countenance, the first impression remained the strongest and the last,—that it was, perhaps, altogether the finest head and face that you have ever seen, strikingly handsome, and full of intelligence and power."

It now only remains for us in a single paragraph to mention a few facts about the last years of his life. His contributions to the "Edinburgh Review" ceased when he was appointed professor, but not before he had broken a lance in favor of Oxford University extension. His papers on this subject elicited afterwards the warmest expressions of approval and

thanks from the Commissioners, when they issued their report. He occupied himself, when not engaged in the active duties of his class, on what in some respects was the greatest monument of his philosophical industry and zeal,—an elaborate edition of Reid. He also edited the works of Dugald Stewart, and would, had he been spared, have written a memoir of him. On the study of Luther and his writings he also spent much labor. He cherished a lively interest in the ecclesiastical controversies raging around him, as an elaborate pamphlet with the expressive title, "Be not schismatics, be not martyrs by mistake," amply proves. He continued to teach, with the greatest enthusiasm, a class that yearly increased in numbers till he was struck down by paralysis in 1844, and even after that, whenever he was able, he continued to attend his class, conducted by an assistant, he generally read part of the lecture. He died on the 6th of May, 1856, in the sixty-eighth year of his age. The inscription on his tombstone thus aptly describes the aim of his philosophy and his hope as a man:—"His aim was by a pure philosophy to teach that through a glass darkly, now we know in part; his hope that in the life to come he should see face to face, and know even as he is known." Side by side with this we may place the words of the late lamented Professor Ferrier, who always continued his warm friend and admirer, amid much philosophical difference. "A simpler and a grander nature," he said, "never rose out of darkness into human life; a truer and a grander character God never made. How plain and yet how polished was his life in all its ways, how refined and yet how robust and broad his intelligence in all its workings."

Professor Veitch in his preface states that the aim of his book is entirely biographical, and we have dealt with it accordingly. There is, however, in an appendix, some fifty pages of purely philosophical matter, in which Professor Veitch shows much power and comprehension in explaining and defending his master's philosophy against the attacks of Mr. Mill. Mr. Veitch is thoroughly competent for the task, and in some cases returns Mr. Mill's assaults with a vigorous enthusiasm and hearty power

of philosophical buffeting very impressive and exciting. But we do not venture to enter such an arena, or to mete out justice between two such combatants.

Dublin University Magazine.

THE REFORMER OF MESSINA.

RATHER more than a century ago, the chronicles of the Island of Sicily recorded, or some inventive interpolater introduced into them, a strange story of a "Reformer" of that day, which furnished the foundation for Monk Lewis's romance of the "Bravo of Venice," published in 1805, and dramatized shortly after by himself as "Rugantino," a melodrama which obtained great success in Dublin, and established the histrionic fame of Harry Johnston. The subject was also made into a play in the same year by R. W. Elliston, and acted at Drury Lane. Monk Lewis translated from the German, Elliston from the French. But the story—historical or fabulous, we pretend not to decide which—came originally from the source named above. Thus it runs:—

This self-elected Minos is described neither as a philosopher nor philanthropist of lofty intellectual endowments or position, but as an obscure, industrious mechanic, whose daily drudgery did not prevent him from noticing the scenes which passed before him. He saw, with indignation, a total absence of public virtue and private principle: honesty oppressed and vice rewarded; the sword of justice turned aside by corruption, and a want of power or inclination in the ruling authorities to chastise offenders. Under the impulse of such convictions, he resolved boldly to take on himself the task of a Reformer.

Having previously determined in his own mind that corruption and vice were too deeply rooted to admit of palliative remedies, he resolved to work on the fears of the wicked and unbelieving by *instant* visitation, from a quarter unseen, unknown, and beyond their power to guard against or avoid. Providing himself with a short gun, concealed under his cloak, he sallied forth on dark nights, and as convenient opportunities offered, despatched obnoxious offenders of all ranks, whose notorious enormities had long condemned them in public opinion. In different parts of Messina, within a

few months, many individuals were found shot, but their property untouched. Usurers who had ruined thousands by extortion; unjust, oppressive magistrates; pretended patriots, who opposed every measure of government for personal aggrandisement; adulterers and debauchees; husbands who blushed not to live on the price of nuptial prostitution; and wives who considered beauty as a fair resource for repairing the losses at the Faro table.

Astonishment became absorbed in terror. No villain of consequence dared to walk the streets. No vigilance could discover the murderer. Guards and spies were equally unavailing. It was thought, too, that the mass of the people were not wholly displeased at these rapid judgments and speedy executions. After more than fifty of the most notoriously flagitious men of the city had been put to death, without a clue to the detection of the executioner, the Viceroy of Sicily issued a proclamation, in which he offered a reward of ten thousand crowns to any one who should apprehend or be instrumental in apprehending the offender or offenders; the same sum and a free pardon were also promised to the person who actually committed the murders in question, if he would confess them, and the motives by which he was actuated. To render his sincerity unquestionable, the Viceroy went publicly, in procession, and with great pomp, to the cathedral; received the sacrament, and solemnly repeated a promise at the altar, that he would strictly, and without mental reservation, perform his vow in every particular.

The assassin having satisfied his zeal for justice, and being willing to secure safety as well as that independence he thought he deserved, immediately repaired to the palace, demanded an audience, and after strong assurances from the Prince that he would religiously observe his oath, confessed himself the sole murderer of the victims, who at different times had been found in the

streets. The Viceroy, suppressing, as far as he was able, the strong emotions of horror and surprise which struggled in his breast, proceeded to argue with the Reformer on the unjustifiable nature of his proceedings, in thus taking the law into his own hands, and dispensing with judicial process. The criminal defended himself on the plea of morality and virtue; insisted that the characters of those he swept off were too notorious to require legal trial, and boldly reprimanded the chief magistrate for allowing them to live.

The royal representative, whatever might have been his inclination, religiously kept his vow, paid the stipulated sum, and not considering Messina a proper residence for the mechanic, after what had happened, shipped him, with his family and effects, from the island, in a vessel bound to Genoa; and he passed the remainder of his life in the

territory of that republic. His late fellow-citizens confessed that for many subsequent years they felt the advantage of his unrelenting, but impartial justice. But it is well for rulers and the ruled, and for the peace of mankind, that this singular being has not had imitators. If every man were to consider himself authorized to wield the sword of justice, the world would become a chaos of misery, anarchy, and bloodshed. It is true, this Sicilian dispenser of law possessed several requisites for a root and branch reformer—integrity of purpose, disinterested patriotism, and personal intrepidity. But to render his decisions unerring he required *omniscience*, which is not extended to man. "Vengeance is mine, I will repay, saith the Lord!" He to whom all hearts are open has reserved this power to himself, and he can alone dive into the deeply seated motives of human actions.

Popular Science Review.

IN ARTICULO MORTIS,

BY BENJAMIN W. RICHARDSON, M.D., F.R.S.

I HAVE recently read in Hammond's Journal of Psychological Science for January of the present year, an essay of more than ordinary interest by Dr. La Roche, of Philadelphia, on the subject of the "Resumption of the Mental Faculties at the Approach of Death." The intention of the learned author of this essay is to show that, in cases where a sick person has for some hours or days been lying in delirium, he may suddenly become conscious, may speak with wisdom, with power of memory, it may be with pleasure, and yet speak thus as but a presage to the death which quickly follows. The clearest evidence is given of this fact, and the frequency of the occurrence of the phenomenon in the course of the acute fevers-endemic in hot climates is forcibly dwelt on. In yellow fever the stage of inflammatory reaction continues, says La Roche, with little or no mitigation from some hours to two or three or more days—generally from sixty to seventy-two hours, and is succeeded by the state of remission (the metoptosis of Mosley or the stadium of Lining) without fever. The pulse loses

its excitement, becomes almost natural or slower than in health, or rapid, feeble, and nearly imperceptible; the skin regains its natural temperature, then is colder and colder, and bedewed with cold perspiration; the pain of the head, back, and limbs disappears, or is greatly diminished. The redness and glistening appearances are no longer apparent, but the redness is replaced by a yellow tinge. These signs in the general course of the disease portend approaching death, yet are they accompanied with other signs marvellously singular; the wandering or violent delirium, the seeming sensibility, or deep sleep (coma), subside more or less completely. The patient, who some moments before raved like a maniac, or talked irrationally, or could not be aroused, regains his natural condition of mind; thinks, or endeavors to represent himself; converses rationally on all subjects; is cheerful; sits up in or gets out of bed; walks with a firm step; expresses an appetite for food, and relishes what he takes; and, after enjoying this state of repose for some time, suddenly faints, or is seized with a convulsion, and expires.

Our learned narrator leads us from these facts, which with him are personal experiences, to teach us that all through the literary history of the science of medicine similar facts are recorded. Hippocrates is adduced by him as telling of the symptoms of death in similar cases, and as closing his description with the observation that, "As to the state of the soul every sense becomes clear and pure, the intellect acute and the gnostic powers so prophetic that the patients can prognosticate to themselves in the first place their own departure from life, then what will afterward take place to those present." After this the exquisite picture of the death of Pericles is conjured up from Plutarch, with true artistic skill, to sustain the argument. A plague, perchance a typhus raging and decimating the city of Athens, claims amongst its victims the famous soldier and statesman. The sufferer has in the earlier stages of his malady lucid intervals, and in one of these intervals he wakes up to find round his neck an amulet or charm the women had hung about him; he shows this to one of his friends, to convey that he is very sick indeed to admit of such foolery. Then the disease progressing, the delirium becomes more persistent, and is succeeded by a fit of lethargy, with other indications that death is near. And now, the end close at hand, the friends sitting around, treating him as one absent, speak of the greatness of his merit, reckon up and recount his actions, and the number of his victories; the nine trophies which, as their chief commander and conqueror of their enemies, he has set up for the honor of their city. But, while they thus speak, he has listened and understood, and waking up speaks to them; tells them he wondered they should commend and take notice of things which were as much owing to fortune as to anything else, and had happened to many commanders, while at the same time they should not make mention of that which was the most excellent and greatest thing of all, that no Athenian, through his means, ever wore mourning. And soon after this he dies. Returning from his historical survey, our author, La Roche, comes once more to his own experiences of the phenomena of lucid interval in articulo mortis, after long

terms of unconscious existence, and shows by the most convincing demonstration that even in inflammation of the coverings of the brain, associated with change in the brain substance itself, there may be lucidity of thought antecedently to and up to the moment of death.

The nature of the modifications which take place in the diseased organ, and which may account for a resumption of the mental functions after an interruption of some days, is discussed, speculated on well, and still left unsolved. I must not be tempted to linger on so fertile a theme for my pen, but must proceed to that which, on the present occasion, is the task before me.

The perusal of La Roche's essay has recalled many observations I have made, and many thoughts that have crossed my mind, when, in the exercise of my useful, though often powerless, art, I have been obliged to see, with humiliated sense, the mastery of the last great enemy. Whether a brief description of certain of these observations and thoughts will, reduced to writing, be of service, I cannot predict; but in the unsurpassed and unsurpassable state of general ignorance on the subject, I feel if they do anything they can do nothing but good. They may tend to bring the phenomena of death before the mind of the world, as phenomena belonging strictly to the natural—phenomena which should quicken no mystery, gratify no credulity, inspire no false report of Nature and her works.

THE MIND AND DEATH.

In the first place I would remove, as far as is possible, the idea—offspring of superstition and grand-offspring of fear—that by the strict ordinance of nature death is mentally a painful or cruel process to those who are passing through it. I admit, as an obvious truth told every day to all of us by Nature herself, that in the details of her work she, Nature, is not always kind, not always—according to our sense of the word—beneficent; that in her one and grand intent of evolving an universal perfection there is no such special adaptation for advancement, that the advancement shall come with happiness ever by its side, or without pain or misery, to those who are to be perfected. At the same time, in this

matter of dying the Supreme Intelligence is to all forms of living thing beneficent. In animals inferior to man and less capable of defence, He has removed further than from man the foreknowledge and dread of death; so that at the *abattoir* animals after animals, seeing their fellows fall, go in turn to their fate without a shudder or a moment of resistant fear.

In regard to human kind, the Supreme Wisdom has also confined the direct terror of actual death to or near to the moment of death. We find in poetry and sentiment displays of argument truly about life; about the value of life as individually cast in the man; about the dread of losing life, and the like. We find in *fact* that the poetry is misapplied romance, and the sentiment mistaken effort at philosophy. At a pinch, at desperate and sudden and unexpected conflict with death, most men of strong physical powers and strong will would give all they have for life; that is to say, all they have that could be regained by living; but beyond this there is not much actual and natural terror of death in man. For advancement towards perfection every individual man instinctively obeys the primary will of nature, and advances towards the object with no fear of death in his view. Thus there is little antecedent pain or mental suffering respecting the act of death; so little, that all the systematized use that is made of the terror to render it a moral subjugator has proved harmless; so little, that when we see in any man an undue fear of death—a fear which makes him brood over the grand event, and talk of it to all he meets, and shrink from it by anticipation, and take refuge from it behind straws—we treat him as an exception of an extreme kind to the rest of the world; politely dub him a hypochondriac, and invariably feel that his friends, who are his best keepers, represent him better than he represents himself.

At the worst, in the natural growth of mind, the period of existence in which the dread of death is developed intensely is a period embracing in the majority of persons the mere third of the term of existence. In the young the appreciation of the nature of the event is an act of learning from what is occurring around, and is an act not acquired quickly; so that,

happily, the very young, in *articulo mortis*, have, as a rule, no more dread of death than of sleep. In the adolescent there is such rapid aggregation of force—call it life—that they think of death to the last as to them impossible. In the old, the dread which may have marked a transitional stage from prime strength to first weakness, the terror is allayed by lesser care for that which is, and by that curious mental process so persistent that it seems to proceed from beyond us, of bending the mind to the inevitable so gradually and so slowly that the progress towards the final result becomes endurable and even happy.

THE PHYSICAL DEATH BY NATURE.

If, by the strict ordinance of nature, death is not intended to be cruel or painful to the mind, so, by the same ordinance, it certainly is not intended to be cruel or physically painful to the body. The natural rule, the exceptions to which I will speak of in due time, is here clear enough; and it runs, as plainly as it can be written, that the natural man should know no more concerning his own death than his own birth. Born without the consciousness of suffering, and yet subjected at the time to what in after life would be extreme suffering, he will die, if the perfect law be fulfilled in him, oblivious, in like manner, of all pain, mental or physical. At his entrance into the world, he sleeps into existence and awakens into knowledge; at his exit from the world, his physical cycle completed, he dozes into sleep and sleeps into death.

This purely painless, purely natural physical death, is the true euthanasia, and it is the business equally of the physician and of the priest to lead all men to this death as healthily, as happily, as serenely as can be. In respect to the physician, this is his business all in all; and, in regard to the priest, it is so far his business, that, in proportion as his labors help towards the end, they help to the moralization of the world. For euthanasia, though it be open to every race and every nation to have and to hold, is not to be had by any nation that disobeys the laws on which true health, and its obedient follower, true happiness, depend; while, to a nation [that should

obey the law, death would neither be a burthen nor a sorrow.

Despite all our efforts against her, even as the social state now is, nature will indeed still vindicate herself at times, and show us determinedly how she would if she could, involve, fold imperceptibly, life in death: how, if the free will, with which she has armed us, often against herself, were brought into time and tune with her, she would give us the beauties and wonders of the universe for our portion, so long as the brain could receive and retain, the mind appreciate, and at last would wean us from the world by the most silent of ways, leading us to euthanasia. The true euthanasia (I have read it through all its stages ten times at the least) is, in its perfection, among the most wonderful of natural phenomena. The faculties of mind which have been intellectual, without pain, or anger, or sorrow, lose their way, retire, rest. Ideas of time and place are gradually lost; ambition ceases; repose is the one thing asked for, and sleep day by day gently and genially wiles away the hours. The wakings are short, painless, careless, bappy: awakenings to a busy world; to hear sounds of children at play; to hear, just audibly, gentle voices offering aid and comfort; to talk a little on simple things, and by the merest weariness to be enticed once again into that soothing sleep, which, day by day, with more frequent repetition, overpowers all. At last, the intellectual man reduced to the instinctive, the consummation is desirable; and without pain or struggle, or knowledge of the coming event, the deep sleep that falls so often is the sleep perpetual—euthanasia. This, I repeat, is the death by nature; and when mankind has learned the truth; when, as will be, the time shall come, "that there shall be no more an infant of days, nor an old man who hath not filled his days," the act of death shall be as mercifully accomplished as any operation, which, on the living body steeped in deep oblivion, the modern surgeon painlessly performs.

EXCEPTIONS TO THE NATURAL DEATH.

In the natural order and course of the universe there are admitted, as I have said already, some exceptions from the

process of the purely natural death. Unswerving in great designs, and at the same time foreseeing every detail of result, the supreme organizing mind has imposed on the living world his storms and tempests, and earthquakes, and lightnings, and all those great voices and sublime manifestations of his mighty power, which, in the infant days of the world, men saw or heard with servile fear. Thus has he exposed us to natural accidents, but so wisely that to those of the creation who are most exposed he gives a preponderance of number, so that during the forming from the first to the last stage, they shall not suffer ultimate loss by disproportion of mortality. Perchance, too, if we could discover the law, he has provided for such excess of life as shall meet every accident natural and human. Be this as it may, he has provided in respect to death by purely natural causes—causes, I mean, coming direct from nature without the intervention of man; that, in the vast majority of such cases, the sudden, unexpected, inevitable, shall be painless also. As a rule, all forms of death by violence of nature are deaths from the influences of forces all-powerful. Lightning-stroke, sun-stroke, crash of matter, swift burial in great waters—these are the common acts of nature that kill. To the mind these acts present such grandeur of effect, they strike it with a sublime awe; but the body subjected to their fatal stroke is so killed it hath not time to know or to feel. When we experience any sensation of pleasure or of pain, we have in truth to pass through three acts, each distinct and in succession. We have to receive the impression, and it has to be transmitted to the organ of the mind; here it has to be fixed or registered; lastly, the mind has to become aware that the impression is registered, which last act is in truth the conscious act. But for all these acts the element of time is required, and although the time seems to be almost inappreciable, it may be sufficient. Thus with respect to lightning-stroke, if it strike the body to kill, it accomplishes its destruction so swiftly, the impression conveyed to the body is not registered, and therefore is not known or felt; the veritable death, the unconsciousness of existence, is the first and

the last fact of the impression inflicted on the stricken organism. For illustration of this truth I have recently seen—in experiments on the discharge of the Leyden battery at the Polytechnic (the jars being placed in what is called cascade)—animals struck so suddenly to death that they retained, in death, the position of their last natural act of life. The same has been observed in the human subject after extreme violence of nature, as after lightning-stroke, and for evidence that there is truly no consciousness, in such examples we have another and decisive line of proof.

It sometimes happens that the shock of nature, though sufficient to suspend the consciousness and reduce to the lowest degree the physical powers, does still not kill outright, and that after some lapse of time the mechanical disturbance of the animal organic material ceases; that the molecules fall back into their natural form to reconstitute the natural fabric, and that with the gradual restoration of organic structure there is return of normal function and what is called recovery from simulated death. In time the organ of the mind, also restored, the old imagery of the past returns, and down to the moment preceding the accident the details registered and recognized are capable of recall, or, in other words, are remembered. But there the memory ceases; of the swift act that disturbed the matter of the body—not with sufficient force to overcome the attraction of cohesion which holds the parts together, in organic series, not with sufficient force to disorganize, but with sufficient force temporarily to modify the organic form required for function—no recollection remains. In a word, the conditions requisite for the production of an impression are at once destroyed by the vehemence of the impression.

I have taken this effect of lightning-stroke as the most ready and complete illustration of the truth, that what would seem at first a violent and painful death from a purely natural cause is absolutely a painless death. But the illustration may be extended further—may be extended to all the forms of natural violent death. In cases of temporary suspension of life from sunstroke and from severe mechanical injuries, the same phenomena have been observed. The facts

of the injury have not been recorded; there has been no period of conscious recognition of them; there has been no recognition of that act of consciousness which we call pain. Lastly, to those instances where the suspension of life has followed from what would seem the much slower process of sudden burial, removal from atmospheric air, as in drowning, the rule extends. In two examples of which I am able to speak from personal observation, and in which there was restoration after insensibility, produced by sudden immersion in water, the consciousness of all that occurred from and after the immersion was entirely lost. The same experience has been confirmed by, I think, I may say, all observers.

Thus of Nature it may be safely reported, without entering into longer detail, that when in the course of her determined, and, as might seem, unrelenting action, she cannot except even men in their prime from death, she destroys so mightily that the sense of death is forbidden.

THE PHYSICAL DEATH BY MAN.

The spirit bestowed on man, freewill combined with the power to know and to do, to invent, and to imitate nature, places him sometimes in a position to avoid, without presumption, the true accidents of nature. The diversion of the lightning flash so that it shall not injure is a case, among a thousand, in proof of this fact. But this same spirit—this freewill, this super-essential force which acts through matter, and may be wrestled with and conquered by ordinary physical force, and yet defies interpretation—has power also to be destructive, which power it exerts, though with diminishing intensity as it advances towards perfection of knowledge, with the effect of producing far more misery than nature; nay, with the effect of thwarting nature in designs which, if carried out, would lead to the happiness, and the good of all. Thus, the totality of death at this moment is so lifted out of the order of nature by the spirit of freewill, that the world practically is a chamber of suicides. By want, by luxury, by pleasure, by care, by strife, by sloth, by labor, by indolence, by courage, by cowardice, by lust, by unnatural chastity, by ambition, by debasement, by generosity, by avarice,

by pride, by servility, by love, by hate, and by all the hundred opposed and opposing passions in their excess, we die; I mean we kill. To these causes of death we add and mass up physical evils which, except in the case of fighting armies, destroy even more than the passions; evils which pass from the individual to the multitude, and in shape of vile pestilences sweep away, as by selection, the strongest, the faintest, the youngest of the race.

Yet it happens, in this totality of death, in this suicidal destruction, that death as an act is again not, on the whole, cruel or painful. In all the pestilences—and they include a large proportion of the fatal causes—the brain of the stricken usually loses its function long before dissolution, and to the sufferer the last act is a restless sleep. In these forms of disease, when there occurs that strange return to consciousness of which I spoke at the opening of this paper, there is no pain. Those who forebode their deaths are not wretched, and others, the greater part have imparted to them the hope of life, so that they converse as if nothing were amiss, and express that except for a sense of weakness they were well. In cases again of violent death from human causes, from great forces after the order of nature, from crush in collision of railway, crush in battle, the life this moment all action the next all rest, is extinguished without the consciousness of pain. In lingering death, in death from that disease which piles up our mortality, in consumption, painful as it is, terrible even from day to day to witness, not to say bear, the action of death, though it may be physically hard, is not usually cruel. Striking the young in whom the hope of life and belief in life is strong, consumption has for its victims those who accredit not its power, who live to their final hour in happy plannings of the future and die in the dream.

In the lingering and painful diseases of later life, in diseases we consider yet as hopeless, in diseases where the patient foreknows the end—take cancer or broken heart as examples—death is to the sufferer not often an enemy, but a

courted friend. The afflicted here, in case upon case, counts the hour of the release, assured and assuring that "death is better than a bitter life, and everlasting rest than continual sickness; that good things poured on a mouth that is shut are as messes of meat set upon a grave."

I could extend this argument greatly by recalling those *in articulo mortis* whose reason has gone astray; I could, by explaining the phenomena of death in instances where the nervous function is primarily destroyed, strengthen the argument; but the effort is unnecessary. In the end, did I proceed to the end of the chapter of diseases, I should have only those, unhappily but few, who realize pain and cruelty in death from maintaining to the last full mental power in the midst of physical dissolution, or those who, "having peace in their possession," "whose ways are prosperous in all things," and who can "take meat," are forced, in the loss and abandonment of selfish luxury, to give up all and die.

CONCLUSIONS.

I have based this essay on long and careful and truthful observation of the phenomena of death. I have written it for three distinct objects.

1. To declare that Nature, which is to us the visible manifestation of the Supreme Intelligence, is beneficent in the infliction of the act of death; that thwarted in her ways, she is still beneficent, and that she may be trusted by her children.

2. To declare the great law and intention of Nature, that in death there should be no suffering whatever.

3. To declare to men, that whatever there is in death of pain, of terror to the dying; of terror, of unsubdued sorrow to the living, is made pain, made terror, made sorrow; and that to attempt the removal of these is the noblest and holiest task the spirit of man can set itself to carry out and to perfect. It is to give euthanasia to the individual, millennium to the world.

Temple Bar.

NOT A DREAM.

"WHAT I have got to tell you are plain facts. You can try and account for them by physical rules if you please, or you can take them as belonging to the category of things that are not to be explained. That is what I have done for many years. I have never told the story before, because there were those for whom it was a painful subject. They are all dead and gone now, so it doesn't matter.

So spoke the old General whom we had been teasing for a story one winter's night. Hitherto his talk had been of tigers, pig-stickings, Mahratta battles, and other Indian subjects, on which he dilated with the zest of a boy, white-headed veteran as he was. But there was something in his tone now which seemed to prepare us for a very different topic, and we were not mistaken.

I was about eight-and-twenty (he continued), and had just got my company, when it suddenly occurred to me, without rhyme or reason, that I must get leave and go home. I was in good health, and I had a promise of a valuable civil appointment. I had no one in England whom I cared particularly to see again, for I had been left an orphan very early in life, and my uncle, who was my guardian—well, let bygones be bygones. I have seen other youngsters with the same fit upon them. You might as well tell a quail that he need not migrate, as to try and persuade them not to ask for leave; and they are not worth their salt till they get it, as I have told the Directors over and over again. Well, the fit was on me, and home I went. The voyage in those days was no hop, skip, and jump over Egypt and France, but a weary business of three months—if you had good weather—in sailing ships round the Cape. I had plenty of time to think of the wonderfully pleasant things I would do when I landed, and when at last I found myself in London, I was a little disappointed. An hiatus of eleven years plays the very deuce with one's friends and acquaintance. Some people seemed to think that I must want something when I called upon them, and others were so forgetful, that I had half made up my mind to make no further attempt at renewing acquaintances, when

one day, whilst taking my solitary dinner at a restaurant affected by "Indians" (we had no club of our own then), the waiter came up with a card, and, "Beg your pardon, sir," said he, "gentleman in No. 4, sir, hopes no offence, sir, but may your name be Davenport, sir?" I looked at the card; "Mr. James Stuart Cazenove" was elegantly engraved thereon. "My name," I said, "is Davenport, but—it's so confoundedly awkward, you see, for a fellow to claim acquaintance, and you not to know who the deuce he is." I gave the waiter back the card, and the next moment its owner had taken a seat opposite me. "I should have remembered you anywhere," he said, "but you don't remember me. I took the name of Cazenove for a fortune I was lucky enough to get two years ago. I'm little Jim Stuart. Lord! don't you remember 'Cocky' Stuart at Damberley's?" Then I knew him in a moment. Cocky Stuart! the little rascal I had licked at school, whose verses I had done, and been my faithful accomplice in many a poaching adventure at poor old Damberley's.

Oh yes! you girls may smile. You are all very well, kissing and "dearesting" each other at two days' acquaintance, but you don't know what men feel at meeting an old schoolfellow, especially when one of them has been broiling eleven years in India.

"Cocky" Stuart was one of your lucky ones. He inherited a fine business from his father, which seemed to take care of itself. He was made a rich man's heir, and he married well in every sense of the word. He was in London to complete some business matters connected with an estate he had recently bought, and I was one of the first batch of guests who assisted at his house-warming.

"Well, old man," he said, when he had shown me over most part of the house—a huge old Tudor Gothic place which he had restored—to my thinking in great good taste—"what do you think of it?"

"I told him I liked it immensely—that he had just hit the happy mean between comfort and quaintness.

"That's just what Bessie says—it's all her doing. Bless you, I take no credit. It's all her handiwork. I wanted to pull the place down, and build a modern house, but she would not hear of it."

"And quite right too," I told him.

"Why, there's many a duke would envy you those old carved oak wainscotings, those deliciously ugly corbels and stained-glass windows. There must be a legend for every stone, and I'll be bound there's a haunted room."

"Oh! that's nonsense," he replied, rather sharply.

"My dear fellow," I persisted, "a house like this would be nothing without a haunted room. If you haven't got a ghost, pray invent one. I'd just as soon be without a butler if I were you. It's quite *de rigueur* in such a dear old quaint place, I assure you."

"Don't talk nonsense, Davenport."

I remembered afterwards how his voice and manner changed; but I did not notice it at the time. I was in a chaffing mood, and went on.

"Nonsense! Do you call ghosts nonsense?"

"Yes, I do."

"It's very wicked to call ghosts nonsense."

"Davenport, I'd trouble you to drop the subject; I don't like it."

Of course I could say no more after this, and, it being nearly time to dress for dinner, I was shown to my room.

I was somewhat surprised when I entered it. All the other rooms I had seen were, as I have hinted, quaint, old-fashioned, with low ceilings, polished oak floors and wainscotings, some hung with tapestry, and all furnished in keeping with those surroundings. My room was a lofty apartment with a French paper on the walls, a Brussels carpet, a polished steel fire-grate, and a bed and other accessories of the latest fashion. Perhaps it was that the contrast with the other portion of the house made it appear at first harsh, vulgar, and garish. The colors on the walls and floor appeared unnecessarily gay, and two large pier-glasses, with gilt frames, and a mantel-piece covered with crimson velvet, on which a handsome clock ticked loudly, flanked by two elaborate ormolu candelabra, gave it an unusual air for an English bedroom. "This isn't Bessie's

taste, I'll be bound," I mused, as I tied my white choker at one of the glasses. "It's a room they have added to the old house, and Master Jim has had his wicked will with it. The rascal! If he had taken a Clapham villa he could not have done worse."

Bessie was a very gem of a hostess, and before dinner was over her guests, some ten in number, were on perfect good terms; and already the keels of certain small flirtations had been laid.

When the ladies had retired, and we were adjourning to the smoking-room—a rare luxury in those days—"Cocky" took me aside and whispered, "Don't you mind what I said to-day, old man. I didn't mean to be cross, you know; but don't talk about it, like a good fellow. Servants get hold of such things, and play the very deuce."

"Get hold of what things?"

"Oh! you know—about haunted rooms and that. It's all nonsense."

I was half-vexed with him for thinking I would pursue a subject which seemed to annoy him, and, lighting a cheroot, turned to a young person who had amused me greatly by lectures on India, based on information he had gained from tracts written by people as wise as himself.

At last it was bedtime, and my host accompanied me to my room, where he fidgeted about a good deal, and seemed reluctant to leave me. He set the clock right, lit a good many more lights than I could possibly want, and walked about touching small articles of furniture, putting them a little more to the right or left, backwards or forwards, in a nervous way.

"Is there anything you want?" he asked at last.

"No," I said; "nothing, thank you."

"If you do want anything, my room is the third door in the corridor to the left."

"My dear fellow, I'm an old campaigner. I shall sleep like a top in that luxurious bed," I replied.

"Well, good night. Remember the third door to the left if you want anything. Don't forget."

As I lighted him out, I noticed that there was a short passage between the door of my room and the corridor, and this confirmed my idea that the room had been added to the old house.

Directly opposite to where I had sat at dinner was hung the portrait of a very beautiful woman, dressed as a shepherdess with a crook in her lap and a flock of sheep in the distance. I dreamed that this picture came into my room; which suddenly became like any other room in the house, only larger. I awoke, and found the light in the candelabra (which I had forgotten to put out) burning brightly, and everything just as it had been when my host took his departure. I fell asleep again, and was only roused by Cazenove knocking at the door, and saying that the breakfast-bell would ring in twenty minutes.

"Did you sleep well, old man?" he asked.

"Like a child," I replied, jumping out of bed.

"By Jove, I'm so glad!" he cried, with what struck me at the time as unnecessary warmth; and away he went.

When the servant came in with my shaving-water and drew the heavy curtains which hid the window, I got a little start. *It was the window of the room I had seen in my dream!* A large deep bay-window, almost a chamber in itself, with stone copings and divisions and lancet-shaped lights, the small diamond panes in which were set in lead—a window ridiculously out of keeping with the room and its furniture. I had dressed for dinner the day before by candlelight, and seeing the incongruous window now so suddenly, brought back my almost-forgotten dream with, as it were, a mental crash which staggered me for a moment.

Angry with myself for giving way to such fancies, of course I laid the blame on some one else, and inwardly abused my host for anachronism. "With such a window as that standing, why the deuce couldn't he have rebuilt the room in harmony with it?" I growled.

When breakfast was over, I could not help sauntering into the dining-room to have another look at the picture which had troubled my repose. The original must have been very beautiful, and as a work of art the portrait was almost perfect, except for the position of the right hand—a small white hand—but, as I thought, too prominently displayed. There was something even threatening in the attitude.

As I gazed, Cazenove came in, gun in

hand (it was the 1st of September), and rated me for not being ready.

"I told him that I was not only ready, but had been waiting for him. 'Only, before we start,' I said, 'tell me, who is that?'" pointing to the picture.

"Oh, that? That's a portrait," he replied, becoming suddenly grave.

"So I suppose; but of whom?"

"Oh! of some one belonging to people who used to live here long ago."

"Connected with the Surface family, I should think, from their selling their ancestors?" I said. "But, I beg pardon, perhaps she was some relation of your own?"

"God forbid!"

"Well, I'm sure you have no reason to be ashamed of her personal appearance. Show me as beautiful a girl living now, and I'll show you a man who would make a fool of himself for her," I said.

"I've begged and prayed Bessie a score of times," he muttered angrily, not appearing to heed me, "to let me have the infernal thing hacked out of its panel, or painted over, or something—it's a fixture, confound it!—and she won't. I'll do it, though, in spite of her. For God's sake, Davenport, don't stand there staring like an idiot! Come and shoot, if you're coming."

This was the second time he had broken out at me rudely, for no apparent cause, and I began to think that my fortunate friend had had a bad temper left him amongst his other legacies.

At dinner he did me a grievous wrong. Contrary to all law and custom, in defiance of the British Constitution itself, he ordered me away from an exceedingly nice little girl, whom I had taken down, and sent me to the other side of the table, on the pitiful plea that there were two ladies together there. I remembered afterwards that this change brought me with my back to the picture.

The manor had been badly preserved by Cazenove's predecessor, who never lived on it, and we had a good deal of walking for our twenty brace. I was glad indeed when our fair hostess told us we were very stupid, as gentlemen always were in the shooting season, and that the best thing we could do would be to go to bed. If ever a man had an excuse for sleeping like an animal, I had one that night; but I could not sleep.

I could not help thinking of the beautiful shepherdess with the small lily hand, and wondering why my host had spoken so irritably in answer to my questions about her. What did he mean by saying "God forbid!" with so much vehemence when I asked if she were a relation? Why should he want to destroy so admirable a painting?

Small things affect a man with the fidgets on him. The fire was burning brightly in its polished grate, and lighted the room so that almost every object was visible. Of all the rooms in the world, it was the last to have any such legend as I had suggested the day before connected with it. A thing of yesterday, with the smell of French-polish and new carpets not yet blown away, what association could it possibly have with a lady who probably died before Queen Anne? What story, beyond what was told in an upholsterer's bill, could belong to it? When midnight struck, and a cold shiver passed over me, I said to myself, "Davenport, my boy, you got your feet wet in the turnips. Dwellers in the tropics cannot afford to play tricks with their health. That jungle-fever you caught three years ago is not quite out of your bones. A dose of quinine for you to-morrow morning, Master Davenport." Then I shut my eyes, and manfully resolved to sleep. Small things, I say, affect a man with the fidgets on him. The fire worried me; but what was I to do? Empty the water-jug on it?—that would rust the reflecting-bars, and bring on my head the maledictions of an injured housemaid. Take off the coals?—where was I to put them? Besides, there were no tongs, and only a sort of gigantic skewer for a poker. I am afraid I said bad words of that fire and its newfangled irons as I turned my back on it, and tried again to sleep.

At last I fell into a conscious doze, during which the light faded away; and then there came over me that pleasant sensation which says, "You have only to turn over on your other side, and you will go fast asleep." I turned over, and saw that the old enemy of my rest was out. The room was in a total darkness, save where the moonbeams fell in through the window. This struck me as odd, and roused me; for I distinctly remembered that the heavy cloth cur-

tains were drawn close when I went to bed. "Bother the moon!" I exclaimed, and was in the act of jumping out of bed to shut it out, when another light shone suddenly from the opposite side of me, and by this I—as fully awake and in my senses as I am at this moment—saw that the size, shape, furniture, everything about the room had changed, and that it had become the room of my dream the night before!—a sombre oak-panelled room, with a high vaulted roof, in which some tattered banners waved to and fro in the night air mournfully. Even the bed, on which I sat in horror, was not what it had been, but a huge structure with gilded posts and dark heavy drapery, embroidered with quaint devices, as the state-beds of kings and queens in olden times were wont to be. Remindful of my dream, I instinctively turned towards where I fancied I had seen the picture the night before, and there sure enough I saw—not the picture, but *THE ORIGINAL*, standing with a lamp in one hand, and the other in the attitude of the portrait, but with this horrid difference—that the palm was pierced through and through as though by a stab, and blood trickled from it to the ground. There she stood in her fanciful dress, and a look, not of pain or of anger, but of deep unutterable despair, branding the face I had thought so innocent and beautiful, for, I suppose, some minutes, though they seemed hours to me. Then she walked slowly round the room, *close to the wall*, and vanished the instant that she returned to the spot where I had first seen her, leaving me again in darkness.

Now I dare say there are some of you who will say that all this can be explained; and so perhaps it can, *so far*. You may argue somewhat in this wise:—"The old-fashioned part of the house had made an impression on my mind which was strengthened by the contrast presented by my bedchamber. The portrait in the dining-room had also made an impression. I had dreamed of the latter, and, naturally enough, gave it a fitting background." So much for what you will, no doubt, call my *first* dream. You will go on to urge that, "over-tired with a long day's shooting, and with a touch of intermittent fever on me, that first dream made an impression which developed itself into the *second*."

I say again, so far such an explanation might pass. But when impelled by terror—of which I was afterwards heartily ashamed—I knocked up Cazenove, his first words were:

"My God, Davenport! *Have you seen her?*"

Then I knew in a moment why he had answered so irritably my nonsense about haunted chambers, and the inquiries I had made about the portrait.

"I have seen some one," I replied, "and it may be a trick. Bring your lamp and come at once."

"Not for the world," he cried, drawing back. "She never appears a second time to the same person; but I have not seen her yet. You may take the light and satisfy yourself without the slightest danger. It is all over."

I went back, and found everything exactly as it had been—the thick curtains closely drawn over the window, and the fire still burning. Then I rejoined my host in the corridor.

"Don't blame me for what has passed," he said, in a low voice, "until you hear my excuses. I *have* a haunted chamber—worse luck! Look here."

As he spoke he lifted the tapestry, and disclosed a small low door, which I saw from its position should lead into the room I had just left. "Go in," he continued, opening it by pressing a spring, "and look about you. No, there is nothing to fear; I tell you again she never appears twice to the same person. Go in, and judge for yourself if there be any trick."

I went in, and found myself in what appeared, at first, to be a passage between the corridor and my bedroom; but on examining the outer wall, I recognized it, with a cold shudder, as the wall of the room round which the lady with the bleeding hand had passed. I looked up, and there was the dark vaulted roof, there were the tattered banners. *The new room had been built inside the old one.*

The Dream theory will not do now. A dream is a confused set of ideas arising out of something which the sleeper has seen or known of when awake. I had never seen that room; it was hid from me (all but the window) by solid walls of brick. I had every reason to suppose that I was in a new part of the

house. How, in a mere dream, could I *invent* such a thing as a chamber within a chamber? Again, with regard to the picture, I was half in love with the winning grace, the essentially feminine beauty, of the fair shepherdess. In a mere dream I should have made her the central figure of gay scenes, court revels, masques, balls, and the like, which, waking, I fancied she must have graced. How could I *invent* such an improbable thing as that her pretty hand should be stabbed through and through?—that she should be wandering about alone at night with that awful look of despair fixed on her face?

It was no dream.

"Of course, there's no more sleep for either of us to-night," said Cazenove, as I rejoined him. "Come into my dressing-room, and I will tell you all I know about this miserable business."

I was angry with him for what I considered his unfair treatment, and had determined to tell him so; but there was something so dejected in his voice and manner, that I checked myself with the words hot on my lips, and followed him in silence to his room.

His narrative was a long and not intelligible one, for he rambled into many details which had nothing to do with the story, and wasted a good deal of time talking about his bad luck, and giving instances of it; so I had better give it to you in the shape into which I reduced it afterwards, with the help of some further information.

Amongst the cavaliers who cheered the exile of King Charles the Second was a certain Sir Hubert Dyke, a gentleman who had done things in his time on the Spanish Main which we should call by ugly names, but who was a stout soldier, a faithful subject, and—what was more to the purpose in those times—a rich one, thanks to his exploits amongst the galleons of the Don.

When he must have been nearly sixty he married a young French-woman, of whom, when I say that she was very lovely, I have told you the best that can be said of her.

The King got "his own again"—that is to say, he was brought back to waste other folks' property; and Sir Hubert and Lady Dyke got their own again, considerably improved by having passed

through the hands of a crop-eared knave, who, if half that is said of his conduct as a landlord be true, was worth a whole regiment of lawless dare-devils like Sir Hubert.

High festival was held in honor of the Restoration at the manor, and its beautiful lady was the life and soul of the revels, not the least splendid of which was a masque composed by Dryden, in which she appeared as a shepherdess. Amongst the company was a then unknown artist named Lely, who asked and obtained the honor of painting her portrait on a panel in the dining-room. The fume of that masque went abroad, and the King himself commanded its repetition.

But for one thing Sir Hubert would have been a happy man. Amongst my lady's train, and the actors with her in that masque, was a young countryman of hers, who, it turned out, had wooed her before she had charmed the eye of the ex-buccaneer, and whom she loved in spite of her marriage-vows. Dark hints reached Sir Hubert's ears, and I dare say he would have stood on scant ceremony with the disturber of his peace, but that there was the royal visit and the royal command; and, as the masque could not be performed without Monsieur le Goffe, his hateful presence had to be endured. Only one-half of the truth appears to have been known to Sir Hubert, for he is reported to have been most affectionate and courteous towards his beautiful wife up to the last.

The masque went off more brilliantly than before, and all that is known with any certainty of what followed, is that shortly after midnight a wild piercing shriek was heard, and my lady rushed to the King's chamber, calling for help and justice, and showing her hand pierced through and through by a stab. The next day the establishment was broken up. My lady is said to have returned to France, and to have entered a convent. Sir Hubert obtained a military command in Scotland, but Monsieur le Goffe *was never heard of again*. The legend goes that the lovers were surprised; that the lady threw her arms round Le Goffe to protect him from her injured husband's fury, but that he stabbed him to the heart *through her hand*.

The scandal was hushed up, as such things could be in those days, when great people were concerned; but no one could live in the state-chamber, and eventually the fine old house was sold for about a fifth of its value.

"Like a fool as I was," said Cazenove, "I made no inquiries. I saw the place and liked it; so did Bessie. I offered a sum for it which I thought ridiculously small, and to my surprise it was accepted. Not a servant belonging to the vicinity would come to live with us, and so at last the truth leaked out—the place was haunted! Bessie said it was all nonsense; that the state-chamber was far too large and sombre for a bed-room; that its dark walls, and the shadows and noises in the vaulted roof, *created* fancies: and as we could not pull it down without disfiguring the house, we built a modern room inside, which you were the first to occupy. But you see it is no use; there is a curse upon the place!"

"Has it appeared in any other part of the house?" I asked.

"No, never."

"She has appeared to many persons?"

"To every one who has slept in that room—once."

"And—tell me truly, Cazenove, what has followed?"

"Oh, it's no use talking about it any more," he replied, with a renewal of his old petulance.

"Cazenove, I insist on knowing. There is something you wish to conceal—out with it, man! The thing is done and cannot be helped. What has followed?"

"They say that those to whom she appears never marry."

* * * * *

"And were you never married, General?" asked a pretty girl who sat next him.

"Never, my dear," replied the old soldier; "but whether that was my fault, or the ghost's, I cannot say."

"You think it really was a ghost?"

"What am I to think?"

That is a question which has yet to be answered.

HE KNEW HE WAS RIGHT.

BY ANTHONY TROLLOPE.

CHAPTER XL.

"C. G."

THE Miss Spaldings were met at the station at Florence by their uncle, the American Minister, by their cousin, the American Secretary of Legation, and by three or four other dear friends and relations, who were there to welcome the newcomers to sunny Italy. Mr. Glascock, therefore, who ten minutes since had been, and had felt himself to be, quite indispensable to their comfort, suddenly became as though he were nothing and nobody. Who is there that has not felt these sudden disruptions to the intimacies and friendships of a long journey? He bowed to them, and they to him, and then they were whirled away in their grandeur. He put himself into a small, open hackney-carriage, and had himself driven to the York Hotel, feeling himself to be deserted and desolate. The two Miss Spaldings were the daughters of a very respectable lawyer at Boston, whereas Mr. Glascock was heir to a peerage, to an enormous fortune, and to one of the finest places in England. But he thought nothing of this at the time. As he went, he was meditating which young woman was the most attractive, Nora Rowley or Caroline Spalding. He had no doubt but that Nora was the prettier, the pleasanter in manner, the better dressed, the more engaging in all that concerned the outer woman; but he thought that he had never met any lady who talked better than Caroline Spalding. And what was Nora Rowley's beauty to him? Had she not told him that she was the property of some one else; or, for the matter of that, what was Miss Spalding to him? They had parted, and he was going on to Naples in two days. He had said some half-defined word as to calling at the American Embassy, but it had not been taken up by either of the ladies. He had not pressed it, and so they had parted without an understanding as to a future meeting.]

The double journey, from Turin to Bologna and from Bologna to Florence, is very long, and forms ample time for a

considerable intimacy. There had, too, been a long day's journeying together before that; and with no women is a speedy intimacy so possible, or indeed so profitable, as with Americans. They fear nothing,—neither you nor themselves; and talk with as much freedom as though they were men. It may, perhaps, be assumed to be true as a rule, that women's society is always more agreeable to men than that of other men,—except for the lack of ease. It undoubtedly is so when the women be young and pretty. There is a feeling, however, among pretty women in Europe that such freedom is dangerous, and it is withheld. There is such danger, and more or less of such withholding is expedient; but the American woman does not recognize the danger; and, if she withhold the grace of her countenance and the pearls of her speech, it is because she is not desirous of the society which is proffered to her. These two American sisters had not withholden their pearls from Mr. Glascock. He was much their senior in age; he was gentle in his manners, and they probably recognized him to be a safe companion.

They had no idea who he was, and had not heard his name when they parted from him. But it was not probable that they should have been with him so long, and that they should leave him without further thought of him, without curiosity, or a desire to know more of him. They had seen "C. G." in large letters, on his dressing-bag, and that was all they had learned as to his identity. He had known their names well, and had once called Olivia by hers, in the hurry of speaking to her sister. He had apologized, and there had been a little laugh, and a discussion about the use of Christian names,—such as is very conducive to intimacy between gentlemen and ladies. When you can talk to a young lady about her own Christian name, you are almost entitled for the nonce to use it.

Mr. Glascock went to his hotel, and was very moody and desolate. His name was very soon known there, and he received the honors due to his rank

and station. "I should like to travel in America," he said to himself, "if I could be sure that no one would find out who I was." He had received letters at Turin, stating that his father was better, and, therefore, he intended to remain two days at Florence. The weather was still very hot, and Florence in the middle of September is much preferable to Naples. That night, when the two Miss Spaldings were alone together, they discussed their fellow-traveller thoroughly. Something, of course, had been said about him to their uncle the minister, to their aunt the minister's wife, and to their cousin the secretary of legation. But travellers will always observe that the dear new friends they have made on their journey are not interesting to the dear old friends whom they meet afterwards. There may be some touch of jealousy in this; and then, though you, the traveller, are fully aware that there has been something special in the case which has made this new friendship more peculiar than others that have sprung up in similar circumstances, fathers and brothers, and wives and sisters, do not see it in that light. They suspect, perhaps, that the new friend was a bagman, or an opera dancer, and think that the affair need not be made of importance. The American Minister had cast his eyes on Mr. Glascock during that momentary parting, and had not thought much of Mr. Glascock. "He was certainly a gentleman," Caroline had said. "There are a great many English gentlemen," the minister had replied.

"I thought you would have asked him to call," Olivia said to her sister. "He did offer."

"I know he did. I heard it."

"Why didn't you tell him he might come?"

"Because we are not in Boston, Livy. It might be the most horrible thing in the world to do here in Florence; and it may make a difference, because Uncle Jonas is minister."

"Why should that make a difference? Do you mean that one isn't to see one's own friends? That must be nonsense."

"But he isn't a friend, Livy."

"It seems to me as I'd known him forever. That soft, monotonous voice, which never became excited and never disagreeable, is as familiar to me as

though I had lived with it all my life."

"I thought him very pleasant."

"Indeed, you did, Carry. And he thought you pleasant too. Doesn't it seem odd? You were mending his glove for him this very afternoon, just as if he were your brother."

"Why shouldn't I mend his glove?"

"Why not, indeed? He was entitled to have everything mended after getting us such a good dinner at Bologna. By-the-bye, you never paid him."

"Yes, I did,—when you were not by."

"I wonder who he is! C. G.! That fine man in the brown coat was his servant, you know. I thought at first that C. G. must have been cracked, and that the tall man was his keeper."

"I never knew any one less like a madman."

"No;—but the man was so queer. He did nothing, you know. We hardly saw him, if you remember, at Turin. All he did was to tie the shawls at Bologna. What can any man want with another man about with him like that, unless he is cracked either in body or mind?"

"You'd better ask C. G. yourself."

"I shall never see C. G. again, I suppose. I should like to see him again. I guess you would too, Carry. Eh?"

"Of course, I should;—why not?"

"I never knew a man so imperturbable, and who had yet so much to say for himself. I wonder what he is! Perhaps he's on business, and that man was a kind of a clerk."

"He had livery buttons on," said Carry.

"And does that make a difference?"

"I don't think they put clerks into livery, even in England."

"Nor yet mad doctors," said Olivia.

"Well, I like him very much; and the only thing against him is that he should have a man, six feet high, going about with him doing nothing."

"You'll make me angry, Livy, if you talk in that way. It's uncharitable."

"In what way?"

"About a mad doctor."

"It's my belief," said Olivia, "that he's an English swell, a lord, or a duke;—and it's my belief, too, that he's in love with you."

"It's my belief, Livy, that you're a regular ass;"—and so the conversation was ended on that occasion.

On the next day, about noon, the

American Minister, as a part of the duty which he owed to his country, read in a publication of that day, issued for the purpose, the names of the new arrivals at Florence. First and foremost was that of the Honorable Charles Glascock, with his suite, at the York Hotel, en route to join his father, Lord Peterborough, at Naples. Having read the news first to himself, the minister read it out loud in the presence of his nieces.

"That's our friend C. G.," said Livy.

"I should think not," said the minister, who had his own ideas about an English lord.

"I'm sure it is, because of the tall man with the buttons," said Olivia.

"It's very unlikely," said the secretary of legation. "Lord Peterborough is a man of immense wealth, very old, indeed. They say he is dying at Naples. This man is his eldest son."

"Is that any reason why he shouldn't have been civil to us?" asked Olivia.

"I don't think he is the sort of man likely to sit up in the banquettes; and he would have posted over the Alps. Moreover, he had his suite with him."

"His suite was buttons," said Olivia. "Only fancy, Carry, we've been waited on for two days by a lord as is to be, and didn't know it! And you have mended the tips of his lordship's glove!" But Carry said nothing at all.

Late on that same evening, they met Mr. Glascock close to the Duomo, under the shade of the Campanile. He had come out as they had done, to see by moonlight that loveliest of all works made by man's hands. They were with the minister, but Mr. Glascock came up and shook hands with them.

"I would introduce you to my uncle, Mr. Spalding," said Olivia,—"only,—as it happens,—we have never yet heard your name."

"My name is Mr. Glascock," said he, smiling. Then the introduction was made; and the American Minister took off his hat, and was very affable.

"Only think, Carry," said Olivia, when they were alone that evening, "if you were to become the wife of an English lord!"

the violence of her lover, at once rushed up to her own room, and managed to fasten herself in before she had been seen by any one. Her elder sister had at once gone to her aunt when, at Hugh's request, she had left the room, thinking it right that Mrs. Outhouse should know what was being done in her own house. Mrs. Outhouse had considered the matter patiently for awhile, giving the lovers the benefit of her hesitation, and had then spoken her mind to Stanbury, as we have already heard. He had, upon the whole, been so well pleased with what had occurred, that he was not in the least angry with the parson's wife when he left the parsonage. As soon as he was gone Mrs. Outhouse was at once joined by her elder niece, but Nora remained for a while alone in her room.

Had she committed herself; and if so, did she regret it? He had behaved very badly to her, certainly, taking her by the hand and putting his arm round her waist. And then had he not even attempted to kiss her? He had done all this, although she had been resolute in refusing to speak to him one word of kindness,—though she had told him with all the energy and certainty of which she was mistress, that she would never be his wife. If a girl were to be subjected to such treatment as this when she herself had been so firm, so discreet, so decided, then indeed it would be unfit that a girl should trust herself with a man. She had never thought that he had been such a one as that, to ill-use her, to lay a hand on her in violence, to refuse to take an answer. She threw herself on the bed and sobbed, and then hid her face,—and was conscious that in spite of this acting before herself she was the happiest girl alive. He had behaved very badly;—of course, he had behaved most wickedly, and she would tell him so some day. But was he not the dearest fellow living? Did ever man speak with more absolute conviction of love in every tone of his voice? Was it not the finest, noblest heart that ever throbbed beneath a waistcoat? Had not his very wickedness come from the overpowering truth of his affection for her? She would never quite forgive him because it had been so very wrong; but she would be true to him for ever and ever. Of course they could not marry. What!

CHAPTER XLI.

SHOWING WHAT TOOK PLACE AT ST. DIDDULPH'S.

NORA ROWLEY, when she escaped from

—would she go to him and be a clog round his neck, and a weight upon him forever, bringing him down to the gutter by the burden of her own useless and unworthy self? No. She would never so injure him. She would not even hamper him by an engagement. But yet she would be true to him. She had an idea that in spite of all her protestations,—which, as she looked back upon them, appeared to her to have been louder than they had been,—that through the teeth of her denials, something of the truth had escaped from her. Well,—let it be so. It was the truth, and why should he not know it? Then she pictured to herself a long romance, in which the heroine lived happily on the simple knowledge that she had been beloved. And the reader may be sure that in this romance Mr. Glascock with his splendid prospects filled one of the characters.

She had been so wretched at Nuncombe Putney when she had felt herself constrained to admit to herself that this man for whom she had sacrificed herself did not care for her, that she could not now but enjoy her triumph. After she had sobbed upon the bed, she got up and walked about the room smiling; and she would now press her hands to her forehead, and then shake her tresses, and then clasp her own left hand with her right, as though he were still holding it. Wicked man! Why had he been so wicked and so violent? And why, why, why had she not once felt his lips upon her brow?

And she was pleased with herself. Her sister had rebuked her because she had refused to make her fortune by marrying Mr. Glascock; and to own the truth, she had rebuked herself on the same score when she found that Hugh Stanbury had not had a word of love to say to her. It was not that she regretted the grandeur which she had lost, but that she should, even within her own thoughts, with the consciousness of her own bosom, have declared herself unable to receive another man's devotion because of her love for this man who neglected her. Now she was proud of herself. Whether it might be accounted as good or ill-fortune that she had ever seen Hugh Stanbury, it must at any rate be right that she should be true to him now that she had seen him, and had loved

him. To know that she loved and that she was not loved again had nearly killed her. But such was not her lot. She too had been successful with her quarry, and had struck her game, and brought down her dear. He had been very violent with her but his violence had at least made the matter clear. He did love her. She would be satisfied with that, and would endeavor so to live that that alone should make life happy for her. How should she get his photograph,—and a lock of his hair?—and when again might she have the pleasure of placing her own hand within his great, rough, violent grasp? Then she kissed the hand which he had held, and opened the door of her room, at which her sister was now knocking.

"Nora, dear, will you not come down?"

"Not yet, Emily. Very soon I will."

"And what has happened, dearest?"

"There is nothing to tell, Emily."

"There must be something to tell. What did he say to you?"

"Of course you know what he said."

"And what answer did you make?"

"I told him that it could not be."

"And did he take that,—as final, Nora?"

"Of course not. What man ever takes a No as final?"

"When you said No to Mr. Glascock he took it."

"That was different, Emily."

"But how different? I don't see the difference, except that if you could have brought yourself to like Mr. Glascock, it would have been the greatest thing in the world for you, and for all of them."

"Would you have me take a man, Emily, that I didn't care one straw for, merely because he was a lord? You can't mean that."

"I'm not talking about Mr. Glascock now, Nora."

"Yes, you are. And what's the use? He is gone, and there's an end of it."

"And is Mr. Stanbury gone?"

"Of course."

"In the same way?" asked Mrs. Trevelyan.

"How can I tell about his ways? No; it is not in the same way. There! He went in a very different way."

"How was it different, Nora?"

"Oh, so different. I can't tell you

how. Mr. Glascock will never come back again."

"And Mr. Stanbury will?" said the elder sister. Nora made no reply, but after a while nodded her head. "And you want him to come back?" She paused again, and again nodded her head.

"Then you have accepted him?"

"I have not accepted him. I have refused him. I have told him that it was impossible."

"And yet you wish him back again!"

Nora again nodded her head. "That is a state of things I cannot at all understand," said Mrs. Trevelyan, "and would not believe unless you told me so yourself."

"And you think me very wrong, of course. I will endeavor to do nothing wrong, but it is so. I have not said a word of encouragement to Mr. Stanbury; but I love him with all my heart. Ought I to tell you a lie when you question me? Or is it natural that I should never wish to see again a person whom I love better than all the world? It seems to me that a girl can hardly be right if she have any choice of her own. Here are two men, one rich and the other poor. I shall fall to the ground between them. I know that. I have fallen to the ground already. I like the one I can't marry. I don't care a straw for the one who could give me a grand house. That is falling to the ground. But I don't see that it is hard to understand, or that I have disgraced myself."

"I said nothing of disgrace, Nora."

"But you looked it."

"I did not intend to look it, dearest."

"And remember this, Emily, I have told you everything because you asked me. I do not mean to tell anybody else, at all. Mamma would not understand me. I have not told him, and I shall not."

"You mean Mr. Stanbury?"

"Yes; I mean Mr. Stanbury. As to Mr. Glascock, of course I shall tell mamma that. I have no secret there. That is his secret, and I suppose mamma should know it. But I will have nothing told about the other. Had I accepted him, or even hinted to him that I cared for him, I would tell mamma at once."

After that there came something of a lecture, or something, rather, of admonition, from Mrs. Outhouse. That lady did not attempt to upbraid, or to find

any fault; but observed that, as she understood that Mr. Stanbury had no means whatever, and as Nora herself had none, there had better be no further intercourse between them, till, at any rate, Sir Marmaduke and Lady Rowley should be in London. "So I told him that he must not come here any more, my dear," said Mrs. Outhouse.

"You are quite right, aunt. He ought not to come here."

"I am so glad that you agree with me."

"I agree with you altogether. I think I was bound to see him when he asked to see me; but the thing is altogether out of the question. I don't think he'll come any more, aunt." Then Mrs. Outhouse was quite satisfied that no harm had been done.

A month had now passed since anything had been heard at St. Diddulph's from Mr. Trevelyan, and it seemed that many months might go on in the same dull way. When Mrs. Trevelyan first found herself in her uncle's house, a sum of two hundred pounds had been sent to her; and since that she had received a letter from her husband's lawyer saying that a similar amount would be sent to her every three months, as long as she was separated from her husband. A portion of this she had given over to Mr. Outhouse; but this pecuniary assistance by no means comforted that unfortunate gentleman in his trouble. "I don't want to get into debt," he said, "by keeping a lot of people whom I haven't the means to feed. And I don't want to board and lodge my nieces and their family at so much a head. It's very hard upon me either way." And so it was. All the comfort of his home was destroyed, and he was driven to sacrifice his independence by paying his tradesmen with a portion of Mrs. Trevelyan's money. The more he thought of it all, and the more he discussed the matter with his wife, the more indignant they became with the truant husband. "I can't believe," he said, "but what Mr. Bideawhile could not make him come back, if he chose to do his duty."

"But they say that Mr. Trevelyan is in Italy, my dear."

"And if I went to Italy, might I leave you to starve and take my income with me?"

"He doesn't leave her quite to starve, my dear."

"But isn't a man bound to stay with his wife? I never heard of such a thing,—never. And I'm sure that there must be something wrong. A man can't go away and leave his wife to live with her uncle and aunt. It isn't right."

"But what can we do?"

Mr. Outhouse was forced to acknowledge that nothing could be done. He was a man to whom the quiescence of his own childless house was the one pleasure of his existence. And of that he was robbed because this wicked madman chose to neglect all his duties, and leave his wife without a house to shelter her. "Supposing that she couldn't have come here, what then?" said Mr. Outhouse. "I did tell him, as plain as words could speak, that we couldn't receive them." "But here they are," said Mrs. Outhouse, "and here they must remain till my brother comes to England." "It's the most monstrous thing that I ever heard of in all my life," said Mr. Outhouse. "He ought to be locked up;—that's what he ought."

It was hard, and it became harder, when a gentleman, whom Mr. Outhouse certainly did not wish to see, called upon him about the latter end of September. Mr. Outhouse was sitting alone, in the gloomy parlor of his parsonage,—for his own study had been given up to other things, since this great inroad had been made upon his family;—he was sitting alone on one Saturday morning, preparing for the duties of the next day, with various manuscript sermons lying on the table around him, when he was told that a gentleman had called to see him. Had Mr. Outhouse been an incumbent at the West-end of London, or had his maid been a West-end servant, in all probability the gentleman's name would have been demanded; but Mr. Outhouse was a man who was not very ready in foreseeing and preventing misfortunes, and the girl who opened the door was not trained to discreet usages in such matters. As she announced the fact that there was a gentleman, she pointed to the door, to show that the gentleman was there; and before Mr. Outhouse had been able to think whether it would be prudent for him to make some preliminary inquiry, Colonel Osborne was in

the room. Now, as it happened, these two men had never hitherto met each other, though one was the brother-in-law of Sir Marmaduke Rowley, and the other had been his very old friend. "My name, Mr. Outhouse, is Colonel Osborne," said the visitor, coming forward, with his hand out. The clergyman, of course, took his hand, and asked him to be seated. "We have known each other's names very long," continued the Colonel, "though I do not think we have ever yet had an opportunity of becoming acquainted."

"No," said Mr. Outhouse; "we have never been acquainted, I believe." He might have added, that he had no desire whatever to make such acquaintance; and his manner, over which he himself had no control, did almost say as much. Indeed, this coming to his house of the suspected lover of his niece appeared to him to be a heavy addition to his troubles; for, although he was disposed to take his niece's part against her husband to any possible length,—even to the locking up of the husband as a madman if it were possible,—nevertheless, he had almost as great a horror of the Colonel as though the husband's allegation as to the lover had been true as gospel. Because Trevelyan had been wrong altogether, Colonel Osborne was not the less wrong. Because Trevelyan's suspicions were to Mr. Outhouse wicked and groundless, he did not the less regard the presumed lover to be an iniquitous roaring lion, going about seeking whom he might devour. Elderly unmarried men of fashion generally, and especially colonels, and majors, and members of parliament, and such like, were to him as black sheep or roaring lions. They were "fruges consumere nati;" men who stood on club doorsteps talking naughtily and doing nothing, wearing sleek clothing, for which they very often did not pay, and never going to church. It seemed to him,—in his ignorance,—that such men had none of the burdens of this world upon their shoulders, and that, therefore, they stood in great peril of the burdens of the next. It was, doubtless, his special duty to deal with men in such peril;—but those wicked ones with whom he was concerned were those whom he could reach. Now, the Colonel Osbornes

of the earth were not to be got at by any clergyman, or, as far as Mr. Outhouse could see, by any means of grace. That story of the rich man and the camel seemed to him to be specially applicable to such people. How was such a one as Colonel Osborne to be shown the way through the eye of a needle? To Mr. Outhouse, his own brother-in-law, Sir Marmaduke, was almost of the same class,—for he frequented the clubs when in London, and played whist, and talked of the things of the world,—such as the Derby, and the levees, and West-end dinner parties,—as though they were all in all to him. He, to be sure, was weighted with so large a family that there might be hope for him. The eye of the needle could not be closed against him as a rich man; but he savored of the West-end, and was worldly, and consorted with such men as this Colonel Osborne. When Colonel Osborne introduced himself to Mr. Outhouse, it was almost as though Apollon had made his way into the parsonage of St. Diddulph's.

"Mr. Outhouse," said the Colonel, "I have thought it best to come to you the very moment that I got back to town from Scotland." Mr. Outhouse bowed, and was bethinking himself slowly what manner of speech he would adopt. "I leave town again to-morrow for Dorsetshire. I am going down to my friends, the Brambers, for partridge shooting." Mr. Outhouse knitted his thick brows, in further inward condemnation. Partridge shooting! yes;—this was September, and partridge shooting would be the probable care and occupation of such a man at such a time. A man without a duty in the world! Perhaps, added to this there was a feeling that, whereas Colonel Osborne could shoot Scotch grouse in August, and Dorsetshire partridges in September, and go about throughout the whole year like a roaring lion, he, Mr. Outhouse, was forced to remain at St. Diddulph's-in-the-East, from January to December, with the exception of one small parson's week spent at Margate, for the benefit of his wife's health. If there was such a thought, or, rather, such a feeling, who will say that it was not natural? "But I could not go through London without seeing you," continued the Colonel. "This

is a most frightful infatuation of Trevelyan!"

"Very frightful, indeed," said Mr. Outhouse.

"And, on my honor as a gentleman, not the slightest cause in the world."

"You are old enough to be the lady's father," said Mr. Outhouse, managing in that to get one blow at the gallant Colonel.

"Just so. God bless my soul!" Mr. Outhouse shrunk visibly at this profane allusion to the Colonel's soul. "Why, I've known her father ever so many years. As you say, I might almost be her father myself." As far as age went, such certainly might have been the case, for the Colonel was older than Sir Marmaduke. "Look here, Mr. Outhouse, here is a letter I got from Emily——"

"From Mrs. Trevelyan?"

"Yes, from Mrs. Trevelyan; and as well as I can understand, it must have been sent to me by Trevelyan himself. Did you ever hear of such a thing? And now I'm told he has gone away, nobody knows where, and has left her here."

"He has gone away—nobody knows where."

"Of course, I don't ask to see her."

"It would be imprudent, Colonel Osborne; and could not be permitted in this house."

"I don't ask it. I have known Emily Trevelyan since she was an infant, and have always loved her. I'm her godfather, for aught I know,—though one forgets things of that sort." Mr. Outhouse again knit his eyebrows and shuddered visibly. "She and I have been fast friends,—and why not? But, of course, I can't interfere."

"If you ask me, Colonel Osborne, I should say that you can do nothing in the matter;—except to remain away from her. When Sir Marmaduke is in England, you can see him, if you please."

"See him;—of course, I shall see him. And, by George, Louis Trevelyan will have to see him, too! I shouldn't like to have to stand up before Rowley if I had treated a daughter of his in such a fashion. You know Rowley, of course?"

"Oh, yes; I know him."

"He's not the sort of man to bear this sort of thing. He'll about tear Trevelyan in pieces if he gets hold of him. God bless my soul——" the eyebrows went to work again,—"I never heard of such

a thing in all my life! Does he pay anything for them, Mr. Outhouse?"

This was dreadful to the poor clergyman. "That is a subject which we surely need not discuss," said he. Then he remembered that such speech on his part was like to a subterfuge, and he found it necessary to put himself right. "I am repaid for the maintenance here of my nieces, and the little boy, and their attendants. I do not know why the question should be asked, but such is the fact."

"Then they are here by agreement between you and him?"

"No, sir; they are not. There is no such agreement. But I do not like these interrogatives from a stranger as to matters which should be private."

"You cannot wonder at my interest, Mr. Outhouse."

"You had better restrain it, sir, till Sir Marmaduke arrives. I shall then wash my hands of the affair."

"And she is pretty well;—Emily, I mean?"

"Mrs. Trevelyan's health is good."

"Pray tell her though I could not—might not ask to see her, I came to inquire after her the first moment that I was in London. Pray tell her how much I feel for her;—but she will know that. When Sir Marmaduke is here, of course, we shall meet. When she is once more under her father's wing, she need not be restrained by any absurd commands from a husband who has deserted her. At present, of course, I do not ask to see her."

"Of course, you do not, Colonel Osborne."

"And give my love to Nora;—dear little Nora! There can be no reason why she and I should not shake hands."

"I should prefer that it should not be so in this house," said the clergyman, who was now standing,—in expectation that his unwelcome guest would go.

"Very well;—so be it. But you will understand I could not be in London without coming and asking after them." Then the Colonel at last took his leave, and Mr. Outhouse was left to his solitude and his sermons.

Mrs. Outhouse was very angry when she heard of the visit. "Men of that sort," she said, "think it a fine thing, and talk about it. I believe the poor girl is as innocent as I am, but he isn't innocent. He likes it."

"It is easier," said Mr. Outhouse solemnly, "for a camel to go through the eye of a needle, than for a rich man to enter the kingdom of God."

"I don't know that he is a rich man," said Mrs. Outhouse; "but he wouldn't have come here if he had been honest."

Mrs. Trevelyan was told of the visit, and simply said that of course it was out of the question that she should have seen Colonel Osborne. Nevertheless she seemed to think it quite natural that he should have called, and defended him with some energy when her aunt declared that he had been much to blame. "He is not bound to obey Mr. Trevelyan because I am," said Emily.

"He is bound to abstain from evil doing," said Mrs. Outhouse; "and he oughtn't to have come. There; let that be enough, my dear. Your uncle doesn't wish to have it talked about." Nevertheless it was talked about between the two sisters. Nora was of opinion that Colonel Osborne had been wrong, whereas Emily defended him. "It seems to me to have been the most natural thing in life," said she.

Had Colonel Osborne made the visit as Sir Marmaduke's friend, feeling himself to be an old man, it might have been natural. When a man has come to regard himself as being, on the score of age, about as fit to be a young lady's lover as though he were an old woman instead of an old man,—which some men will do when they are younger even than was Colonel Osborne,—he is justified in throwing behind him as utterly absurd the suspicions of other people. But Colonel Osborne cannot be defended altogether on that plea.

CHAPTER XLII.

MISS STANBURY AND MR. GIBSON BECOME TWO.

THERE came to be a very gloomy fortnight at Miss Stanbury's house in the Close. For two or three days after Mr. Gibson's dismissal at the hands of Miss Stanbury herself, Brooke Burgess was still in the house, and his presence saved Dorothy from the full weight of her aunt's displeasure. There was the necessity of looking after Brooke, and scolding him, and of praising him to Martha, and of dispraising him, and of seeing that he had enough to eat, and of

watching whether he smoked in the house, and of quarrelling with him about everything under the sun, which together employed Miss Stanbury that she satisfied herself with glances at Dorothy which were felt to be full of charges of ingratitude. Dorothy was thankful that it should be so, and bore the glances with abject submission. And then there was a great comfort to her in Brooke's friendship. On the second day after Mr. Gibson had gone she found herself talking to Brooke quite openly upon the subject. "The fact was, Mr. Burgess, that I didn't really care for him. I know he's very good and all that, and of course Aunt Stanbury meant it all for the best. And I would have done it if I could, but I couldn't." Brooke patted her on the back,—not in the flesh but in the spirit,—and told her that she was quite right. And he expressed an opinion, too, that it was not expedient to yield too much to Aunt Stanbury. "I would yield to her in anything that was possible to me," said Dorothy. "I won't," said he; "and I don't think I should do any good if I did. I like her, and I like her money. But I don't like either well enough to sell myself for a price."

A great part, too, of the quarrelling which went on from day to day between Brooke and Miss Stanbury was due to the difference of their opinions respecting Dorothy and her suitor. "I believe you put her up to it," said Aunt Stanbury.

"I neither put her up nor down, but I think that she was quite right."

"You've robbed her of a husband, and she'll never have another chance. After what you've done you ought to take her yourself."

"I shall be ready to-morrow," said Brooke.

"How can you tell such a lie?" said Aunt Stanbury.

But after two or three days Brooke was gone to make a journey through the distant parts of the county, and see the beauties of Devonshire. He was to be away for a fortnight, and then come back for a day or two before he returned to London. During that fortnight things did not go well with poor Dorothy at Exeter.

"I suppose you know your own business best," her aunt said to her one morning. Dorothy uttered no word of

reply. She felt it to be equally impossible to suggest either that she did or that she did not know her own business best. "There may be reasons which I don't understand," exclaimed Aunt Stanbury; "but I should like to know what it is you expect."

"Why should I expect anything, Aunt Stanbury?"

"That's nonsense. Everybody expects something. You expect to have your dinner by-and-by,—don't you?"

"I suppose I shall," said Dorothy, to whom it occurred at the moment that such expectation was justified by the fact that on every day of her life hitherto some sort of a dinner had come in her way.

"Yes,—and you think it comes from heaven, I suppose."

"It comes by God's goodness, and your bounty, Aunt Stanbury."

"And how will it come when I'm dead? Or how will it come if things should go on in such a way that I can't stay here any longer? You don't ever think of that."

"I should go back to mamma and Priscilla."

"Psha! As if two mouths were not enough to eat all the meal there is in that tub. If there was a word to say against the man, I wouldn't ask you to have him; if he drank or smoked, or wasn't a gentleman, or was too poor, or anything you like. But there's nothing. It's all very well to tell me you don't love him; but why don't you love him? I don't like a girl to go and throw herself at a man's head, as those Frenches have done; but when everything has been prepared for you and made proper, it seems to me to be like turning away from good victuals." Dorothy could only offer to go home if she had offended her aunt, and then Miss Stanbury scolded her for making the offer. As this kind of thing went on at the house in the Close for a fortnight, during which there was no going out, and no society at home, Dorothy began to be rather tired of it.

At the end of the fortnight, on the morning of the day on which Brooke Burgess was expected back, Dorothy, slowly moving into the sitting room with her usual melancholy air, found Mr. Gibson talking to her aunt. "There

she is herself," said Miss Stanbury, jumping up briskly; "and now you can speak to her. Of course I have no authority,—none in the least. But she knows what my wishes are." And, having so spoken, Miss Stanbury left the room.

It will be remembered that hitherto no word of affection had been whispered by Mr. Gibson into Dorothy's ears. When he came before to press his suit she had been made aware of his coming, and had fled, leaving her answer with her aunt. Mr. Gibson had then expressed himself as somewhat injured in that no opportunity of pouring forth his own eloquence had been permitted to him. On that occasion Miss Stanbury, being in a snubbing humor, had snubbed him. She had in truth scolded him almost as much as she had scolded Dorothy, telling him that he went about the business in hand as though butter wouldn't melt in his mouth. "You're stiff as a chair-back," she had said to him, with a few other compliments, and these amenities had for awhile made him regard the establishment at Heavitree as being, at any rate, pleasanter than that in the Close. But since that cool reflection had come. The proposal was not that he should marry Miss Stanbury, senior, who certainly could be severe on occasions, but Miss Stanbury, junior, whose temper was as sweet as primroses in March. That which he would have to take from Miss Stanbury, senior, was a certain sum of money, as to which her promise was as good as any bond in the world. Things had come to such a pass with him in Exeter,—from the hints of his friend the Prebend, from a word or two which had come to him from the Dean, from certain family arrangements proposed to him by his mother and sisters,—things had come to such a pass that he was of a mind that he had better marry some one. He had, as it were, three strings to his bow. There were the two French strings, and there was Dorothy. He had not breadth of genius enough to suggest to himself that yet another woman might be found. There was a difficulty on the French score even about Miss Stanbury; but it was clear to him that, failing her, he was due to one of the two Miss Frenches. Now, it was not only that the Miss Frenches were empty-handed,

but he was beginning to think himself that they were not as nice as they might have been in reference to the arrangement of their head gear. Therefore, having given much thought to the matter, and remembering that he had never yet had to play for his own eloquence with Dorothy, he had come to Miss Stanbury asking that he might have another chance. It had been borne in upon him that he had perhaps hitherto regarded Dorothy as too certainly his own, since she had been offered to him by her aunt,—as being a prize that required no eloquence in the winning; and he thought that if he could have an opportunity of amending that fault, it might even yet be well with his suit. So he prepared himself, and asked permission, and now found himself alone with the young lady.

"When last I was in this house, Miss Stanbury," he began, "I was not fortunate enough to be allowed an opportunity of pleading my cause to yourself." Then he paused, and Dorothy was left to consider how best she might answer him. All that her aunt had said to her had not been thrown away upon her. The calls upon that slender meal-tub at home she knew were quite sufficient. And Mr. Gibson was, she believed, a good man. And how better could she dispose of herself in life? And what was she that she should scorn the love of an honest gentleman? She would take him, she thought,—if she could. But then there came upon her, unconsciously, without work of thought, by instinct rather than by intelligence, a feeling of the closeness of a wife to her husband. Looking at it in general she could not deny it would be very proper that she should become Mrs. Gibson. But when there came upon her a remembrance that she would be called upon for demonstration of her love,—that he would embrace her, and hold her to his heart, and kiss her,—she revolted and shuddered. She believed that she did not want to marry any man, and that such a state of things would not be good for her. "Dear young lady," continued Mr. Gibson, "you will let me now make up for the loss which I then experienced?"

"I thought it was better not to give you trouble," said Dorothy.

"Trouble, Miss Stanbury! How could it be trouble? The labor we delight in physics pain. But to go back to the subject-matter. I hope you do not doubt that my affection for you is true, and honest, and genuine."

"I don't want to doubt anything, Mr. Gibson; but——"

"You needn't, dearest Miss Stanbury; indeed you needn't. If you could read my heart you would see written there true love very plainly;—very plainly. And do you not think it a duty that people should marry?" It may be surmised that he had here forgotten some connecting link which should have joined without abruptness the declaration of his own love, and his social view as to the general expediency of matrimony. But Dorothy did not discover the hiatus.

"Certainly, — when they like each other, and if their friends think it proper."

"Our friends think it proper, Miss Stanbury,—may I say Dorothy?—all of them. I can assure you that on my side you will be welcomed by a mother and sisters only too anxious to receive you with open arms. And as regards your own relations, I need hardly allude to your revered aunt. As to your own mother and sister,—and your brother, who, I believe, gives his mind chiefly to other things,—I am assured by Miss Stanbury that no opposition need be feared from them. Is that true, dearest Dorothy?"

"It is true."

"Does not all that plead in my behalf? Tell me, Dorothy."

"Of course it does."

"And you will be mine?" As far as eloquence could be of service, Mr. Gibson was sufficiently eloquent. To Dorothy his words appeared good, and true, and affecting. All their friends did wish it. There were many reasons why it should be done. If talking could have done it, his talking was good enough. Though his words were in truth cold, and affected, and learned by rote, they did not offend her; but his face offended her; and the feeling was strong within her that if she yielded, it would soon be close to her own. She couldn't do it. She didn't love him, and she wouldn't do it. Priscilla would not grudge her her share out of that meagre meal-tub. Had not Priscilla told her not to marry the man if

she did not love him? She found that she was further than ever from loving him. She would not do it. "Say that you will be mine," pleaded Mr. Gibson, coming to her with both his hands outstretched.

"Mr. Gibson, I can't," she said. She was sobbing now, and was half choked by tears.

"And why not, Dorothy?"

"I don't know, but I can't. I don't feel that I want to be married at all."

"But it is honorable."

"It's no use, Mr. Gibson; I can't, and you oughtn't to ask me any more."

"Must this be your very last answer?"

"What's the good of going over it all again and again. I can't do it."

"Never, Miss Stanbury?"

"No;—never."

"That is cruel, very cruel. I fear that you doubt my love."

"It isn't cruel, Mr. Gibson. I have a right to have my own feelings, and I can't. If you please, I'll go away now." Then she went, and he was left standing alone in the room. His first feeling was one of anger. Then there came to be mixed with that a good deal of wonder, —and then a certain amount of doubt. He had during the last fortnight discussed the matter at great length with a friend, a gentleman who knew the world, and who took upon himself to say that he specially understood female nature. It was by advice from this friend that he had been instigated to plead his own cause. "Of course she means to accept you," the friend had said. Why the mischief shouldn't she? But she has some flimsy, old-fashioned country idea that it isn't maidenly to give in at first. You tell her roundly that she must marry you." Mr. Gibson was just reaching that roundness which his friend had recommended when the lady left him and he was alone.

Mr. Gibson was no doubt very much in love with Dorothy Stanbury. So much, we may take for granted. He, at least, believed that he was in love with her. He would have thought it wicked to propose to her had he not been in love with her. But with his love was mingled a certain amount of contempt which had induced him to look upon her as an easy conquest. He had been, perhaps, a little ashamed of himself for being in love with Dorothy, and had

almost believed the Frenches when they had spoken of her as a poor creature, a dependant, one born to be snubbed,—as a young woman almost without an identity of her own. When, therefore, she so pertinaciously refused him, he could not but be angry. And it was natural that he should be surprised. Though he was to have received a fortune with Dorothy, the money was not hers. It was to be hers,—or rather theirs,—only if she would accept him. Mr. Gibson thoroughly understood this point. He knew that Dorothy had nothing of her own. The proposal made to her was as rich as though he had sought her down at Nuncombe Putney, with his preferment, plus the £2000, in his own pocket. And his other advantages were not hidden from his own eyes. He was a clergyman, well thought of, not bad-looking certainly, considerably under forty,—a man, indeed, who ought to have been, in the eyes of Dorothy, such an Orlando as she would have most desired. He could not therefore but wonder. And then came the doubt. Could it be possible that all those refusals were simply the early pulses of hesitating compliance produced by maidenly reserve? Mr. Gibson's friend had expressed a strong opinion that almost any young woman would accept any young man if he put his "com'ether" upon her strong enough. For Mr. Gibson's friend was an Irishman. As to Dorothy the friend had not a doubt in the world. Mr. Gibson, as he stood alone in the room after Dorothy's departure, could not share his friend's certainty; but he thought it just possible that the pulsations of maidenly reserve were yet at work. As he was revolving these points in his mind, Miss Stanbury entered the room.

"It's all over now," she said.

"As how, Miss Stanbury?"

"As how! She's given you an answer; hasn't she?"

"Yes, Miss Stanbury, she has given me an answer. But it has occurred to me that young ladies are sometimes,—perhaps a little—"

"She means it, Mr. Gibson; you may take my word for that. She is quite in earnest. She can take the bit between her teeth as well as another, though she

does look so mild and gentle. She's a Stanbury all over."

"And must this be the last of it, Miss Stanbury?"

"Upon my word, I don't know what else you can do,—unless you send the Dean and Chapter to talk her over. She's a pig-headed, foolish young woman;—but I can't help that. The truth is, you didn't make enough of her at first, Mr. Gibson. You thought the plum would tumble into your mouth."

This did seem cruel to the poor man. From the first day in which the project had been opened to him by Miss Stanbury, he had yielded a ready acquiescence,—in spite of those ties which he had at Heavitree,—and had done his very best to fall into her views. "I don't think that is at all fair, Miss Stanbury," he said, with some tone of wrath in his voice.

"It's true,—quite true. You always treated her as though she were something beneath you." Mr. Gibson stood speechless, with his mouth open. "So you did. I saw it all. And now she's had spirit enough to resent it. I don't wonder at it; I don't indeed. It's no good your standing there any longer. The thing is done."

Such intolerable ill-usage Mr. Gibson had never suffered in his life. Had he been untrue, or very nearly untrue, to those dear girls at Heavitree for this? "I never treated her as anything beneath me," he said at last.

"Yes, you did. Do you think that I don't understand? Haven't I eyes in my head, and ears? I'm not deaf yet, nor blind. But there's an end of it. If any young woman ever meant anything, she means it. The truth is, she don't like you."

Was ever a lover despatched in so uncourteous a way! Then, too, he had been summoned thither as a lover, had been especially encouraged to come there as a lover, had been assured of success in a peculiar way, had had the plum actually offered him! He had done all that this old woman had bidden him,—something, indeed, to the prejudice of his own heart; he had been told that the wife was ready for him; and now, because this foolish young woman didn't know her own mind,—this was Mr. Gibson's view of the matter,—he was re-

viled and abused, and told that he had behaved badly to the lady. "Miss Stanbury," he said, "I think that you are forgetting yourself." "Highly, tightly!" said Miss Stanbury. "Forgetting myself! I shan't forget you in a hurry, Mr. Gibson."

"Nor I you, Miss Stanbury. Good morning, Miss Stanbury." Mr. Gibson,

as he went from the hall-door into the street, shook the dust off his feet, and resolved that for the future he and Miss Stanbury should be two. There would arise great trouble in Exeter; but, nevertheless, he and Miss Stanbury must be two. He could justify himself in no other purpose after such conduct as he had received.

(To be continued.)

Belgravia.

BRITISH PEARLS.

SENECA, the Roman moralist, found fault with a patrician lady of his acquaintance for wearing a whole fortune in her ears; not meaning to insinuate that the said ears, like pinky Venus-shells, were a fortune in themselves—for, as a philosopher, he was above such *fadaises*—but because he was aghast at the millions of sesterces represented by each of her pearl eardrops. The taste for pearls is of very great antiquity, but it is remarkable that they are mentioned but once in the Old Testament, viz. in Job xxviii. 18, in conjunction with coral. Solomon's merchant navy traded to Ormuzd and Ind, possibly even to Ceylon; yet, though his ships are recorded to have brought back consignments of ivory, apes, and peacocks, and doubtless precious stones also, we hear nothing of pearls in the enumeration of their master's riches. However, in the New Testament we find the "pearl of great price" employed, as an image familiar to oriental minds, to typify something of exceeding beauty and value; and in after years, throughout the flowery language of Eastern poets and improvisatores, "fair and spotless as a pearl" became proverbial, more especially in reference to the unsullied purity of virtue. We can hardly suppose that the pearl-oysters of Ceylon or the Persian Gulf were unknown to Solomon or to his Phœnician ally, Hiram king of Tyre, whose ships traded far and wide, and possibly rounded the Cape of Storms centuries before Vasco di Gama renamed it the "Cape of Good Hope" on his way to India.

Pearls appear to have been known at Rome after the Jugurthine War (they are still found off the Algerine coast at

the present day), but it was not until after the taking of Alexandria that they became universally fashionable in the imperial city. Previously to this, however, the fame of the pearls of Britain had reached the ears of Julius Cæsar in Gaul; nay, Suetonius declares that the cupidity of the future emperor, who had a pretty taste for gems and *objets de luxe* of every description, was the main inducement for his first invasion of Britain, where he hoped to possess himself of some of these pearly treasures. After the occupation of Britain by the Romans, we find Cæsar presenting a buckler, incrustated with Britannie pearls, to Venus Genetrix, suspending it as a votive offering in the temple of that goddess at Rome. Pliny takes care to mention that the inscription recorded their British origin (this alone implies that oriental pearls must have been already well known), and he rather seems to disparage the gift on that account; but the Roman ladies were apparently of a different opinion, for Britannie pearls speedily became the rage, and enormous sums were given for choice specimens by the fair leaders of *ton* at Rome, Pompeii, and "shining" Baïæ, the Biarritz of imperial Rome. Antony, or as some allege, Agrippa, brought a pearl from Egypt so large that, cut in half, it formed a pair of earrings for the statue of Venus in the Pantheon; but this was of course an oriental or an African gem. The Roman ladies wore pearls in their hair and on various parts of their dress, even on the straps of their sandals, as well as on their arms, neck, and ears. In the latter they were frequently worn, as we learn from Pliny, loosely strung

together in separate drops, when they were termed *crotalia*, or castanet-pendants, and the fair wearers took a childish delight in the rattling of these drops as they clicked against each other with every movement of the head. Pliny denounces the new "sensation" very warmly, complaining that the malady had reached even the common people, who had a proverbial saying that "a pearl worn by a woman in public is as good as a lictor before her." He further makes mention of a wedding-feast, at which Lollia Paulina, the wife of Caligula, was present, covered with emeralds and pearls disposed in alternate layers and rows on her head and hair, woven into wreaths, hanging from her ears, encircling her neck, arms, and fingers, and decorating every part of her dress. He gravely censures this prodigal display, and appraises it at no less than 300,000*l.* of our money. The Britannic pearls were held in peculiar estimation by these dainty dames for their pinky hue (at the present day those that come from the Persian Gulf are golden yellow, and the Ceylon specimens mostly white), and the oriental ones seem for a time to have gone more or less out of fashion. In reference to Britain, Tacitus, in his *Agricola*, mentions that pearls of a "tawny livid color" were frequently thrown up by the waves on its shores, and then collected by the islanders; but these, from the description of the tint, were in all probability bits of amber, rounded and polished by the action of the waves, such as may be picked up at the present day after any great storm on the Norfolk and Suffolk coasts. We should note, however, that Venerable Bede, writing some centuries later, but quoting apparently from Solinus, says that "excellent pearls are found in the British seas, various in color, though principally white."

Meantime, in the prodigal age of imperial Rome, while the husbands spent half their incomes on banquets of nightingales' tongues and Kentish oysters from the "Rutopian bottom," the latter being imported at fabulous prices,—their wives, as Seneca hints, hung the other half from their ears in the shape of British pearls. Fashion, no less than history, proverbially repeats itself; and since gold and silver-dust for the hair, African

cosmetics, and other adventitious aids to beauty, after being a crying evil in Juvenal's days, have lately returned to us in full force, so likewise are British, and more particularly Scotch, pearls daily more sought after by the fair sex. Even Cleopatra's extravagant feat of dissolving a costly pearl in vinegar and drinking it off at a banquet, had its exact parallel in England during Elizabeth's reign. That grave and otherwise frugal citizen, Sir Thomas Gresham, is said to have reduced to powder a pearl valued at 15,000*l.*, and to have drunk it in a glass of wine to the health of her Majesty, thereby winning his wager from the Spanish ambassador as to which of them would give the most costly dinner. But the material for this ruinous toast was in all probability like its Egyptian prototype, an oriental specimen.

In the Middle Ages Scotch pearls were celebrated on the continent of Europe for their size and beauty, and their peculiar pink hue was highly esteemed by foreign magnates. The famous hussar-jacket of Prince Esterhazy, entirely covered with pearl embroidery, was largely indebted for its sheeny splendor to Scotch pearls. But pearls are fragile things to hold, and at court festivities the prince's track in a waltz was marked by a shower of pearls scattered profusely around him; while the wear and tear incidental to donning and doffing the precious garment was a small fortune to his valet, who carefully gathered up the cast-off wealth of his master from the dressing-room floor.

Nor in these early days was Ireland behindhand in contributing gems "rich and rare" from her loughs and streams. Many beautiful pearls were found in the rivers of Donegal and Mayo, and other districts beyond the Pale; and on October 13, 1688, we find Sir Robert Reading corresponding with the Royal Society on the structure, color, and so forth of the Irish pearls. In England, the pearls from the river Irt in Cumberland, became so noted, that "fair as Irton pearls" became a proverbial byword in the north country. The river Conway, in Wales, was also famous; and at the present day the fresh-water mussels are called by the Welsh countryfolk "deluge-shells," from their supposed origin in Noah's flood. Sir R. Wynne presented

a magnificent pearl from the Conway to Catharine of Braganza, queen of Charles II., and it still figures as one of the principal adornments of the royal crown. Though the mania for native pearls seems to have partially died out in the next half-century, yet between 1761 and 1764, pearls to the value of 10,000*l.* were sent to London from the rivers Tay and Isla, then, as now, the principal centre of the Scottish pearl-fisheries. But, as Mr. Bertram justly remarks, the trade carried on in the corresponding three years of the present century represents far more than double that amount, and it increases every year. We owe the revival of this ancient industry to the discernment and enterprising spirit of a foreign dealer in gems at Edinburgh, who, having occasionally met with fine pearls said to come from the Scotch rivers, was so attracted by their size and beauty, that he resolved to collect them in a systematic way, by travelling through the country and buying-up all the good specimens he could find. This stimulated the search for more; and the visits of the foreign gentleman, who gave such good prices, soon sent man, woman, and child into the lochs and streams, groping for mussels and prizing them open in search of their occasional precious contents. On the classic banks of "bonnie Doon," which at one time had a good reputation for its pearls, the mussel-hunt grew so keen among the Ayrshire folk after the jeweler's visit, that it became locally known as "the pearl-fever." Nor is it surprising that the epidemic should be catching, when we learn that in 1863 the wages paid by him to those employed in pearl-fishing on his account exceeded 150*l.* a month, while there were besides many other fishers who traded independently, making a very comfortable living by an occupation which involved no capital and comparatively slight exertion. The mussels are usually found in the clearer parts of the stream; and if lying too deep to be reached by the hand, are easily captured by inserting a stick between the gaping shells, which instantly close upon it, and both are drawn up together. It would seem that, on an average, one mussel in every 100 or 130 contains a pearl, though this is of course a variable calculation. Mr. Unger was rewarded for his spirited exertions by

gradually collecting a large number of remarkably fine specimens, which commanded prices varying from 5*l.* to 60*l.*; and titled, nay even royal ladies, caught the infection, and eagerly sought after these Scottish gems. Their fame soon spread to the Continent, especially to France, where the Empress Eugénie, herself on one side of Scottish extraction, possesses a splendid necklace formed entirely of Scottish pearls. More recently foreign agents have appeared in the north in quest of these gems, and the trade waxes brisker than ever. Nay, even the Australians, bent upon acclimatization projects, are anxious to import the pearl-mussel to their rivers. Nor is the fishery confined to the Tay, the Doon, or the Isla. Other streams, such as the Clyde, Earn, Teith, Ythan, Forth, &c., yield a fair quota of pearly treasure, according to the nature of their beds. There are four species of fresh-water mussels in the British islands, of which the usual fluviatile sort (*Alasmodon margaritifera*) does not object to a habitat among rocks and stones; whereas its cousin (*Anodon cyaneus*), of a larger size and more homely exterior, prefers the muddy ooze of lake bottoms, or the sandy reaches of our wider and more placid streams. Loch Tay is also very prolific in mussels; and the late Marquis of Breadalbane had a fine collection of pearls gathered from its waters. The partial laying dry of Loch Vennacher, in constructing a sluice for the Glasgow water-works, revealed a great quantity of mussels, wherein many fine pearls were found by the laborers. This incident suggested to Mr. Unger the idea of systematically dredging this and other lochs, and of examining their beds by means of diving apparatus; but the muddy nature of their bottoms proved a great bar to success; and, on the whole, the experiment did not reward his explorations. We regret, moreover, to hear that, as was the case with the marine pearl-fisheries of Ceylon for many years, several of the Scottish streams are nearly exhausted of their mussels by over-fishing; and unless the reformed Parliament furnishes us with a "Pearl-mussel Act," there is some danger of these mollusks becoming extinct in a few years.

The origin of pearls was a subject of much speculation in ancient times, and still provokes considerable discussion

and difference of opinion among zoologists. The ancients fabled that they were originally drops of rain or dew, which falling into the half-opened shells were converted by the animal into pearls by some occult process of nature, "plastic force," or what not. This theory is gravely advanced by Pliny, who in his chapter on pearl-oysters avers further, that pink pearls are produced only upon sunny days, while the dull-hued specimens are due to a cloudy sky, &c. Dioscorides, who ought to have known better, seems to incline to the same opinion, *faute de mieux*. Moore poetically alludes to the theory in the well-known lines:

"And precious the tear as the rain from the sky
Which turns into pearls as it falls in the sea."

In connection with Pliny's statement that the deep-sea pearl-oysters are accompanied by sea-dogs, who act as their faithful guards, Procopius (*De Bello Pers.* b. i. c. 14) tells a whimsical story. He avers that the sea-dogs [qy. dog-fish?] are great admirers of the pearl-fish, and follow them out to sea: that when the sea-dogs are pressed by hunger, they go in quest of prey, and then return to the vicinity of the oysters and gaze upon them. Now, a certain fisherman had noticed these platonic loves of pearl-oyster and sea-dogs, and watching his opportunity when the mollusk was deprived of its faithful sentry, who was absent for a while in search of food, pounced upon the defenceless oyster, and made for the shore with his prize. But the sea-dog, having taken a hasty meal, hurried back on the fins of love to the vicinity of his beloved, arriving just in time to catch a glimpse of the retreating robber. Before the latter could reach the shore he was overtaken by the sea-dog, and a fierce struggle ensued for the pearl-fish. Finding himself getting the worst of it, the fisherman made a last effort, and threw the pearl-fish high and dry on the strand, whereupon he was at once "torn in pieces" (see Procopius) by its infuriated protector. Unluckily we are not informed whence Procopius derived this extraordinary legend, which, as a traveller's tale, combining the poetic with the popular-scientific element, throws the fictions of Herodotus and Strabo completely into the shade.

But to return to the formation of pearls. Modern naturalists, after much patient investigation, generally ascribe their origin to an irritation produced by the intrusion of some foreign body, such as a grain of sand or grit into the shell or body of the mollusk; this particle becoming in due time, by a pathological process, covered over with a calcareous secretion deposited thereon in successive layers or lamellations.

The late Professor Quekett subjected a sea-pearl to microscopic examination, and found the nucleus to be a minute portion of steel, probably from its position part of the blade of an oyster-knife, which having chipped off in a vain attempt to open the oyster, had been coated over with pearly matter by the mollusk. The exact chemical composition of this secretion, termed *nacre* by zoologists, has never been satisfactorily ascertained, but its calcareous origin would account for Cleopatra's pearl being so easily soluble in vinegar. The material is deposited in irregular layers, overlapping each other in such a manner that the edges of the successive nacreous coats present, when highly magnified, sharply-serrated outlines; and it is not improbable that to this irregularity of deposition pearls are indebted for their peculiar sheeny lustre. They are usually found between the mantle or shell-secreting membrane and the shell itself; but they also not unfrequently occur loose in the viscera or muscles of the animal. Those of a perfectly spherical form are seldom met with except loose in the interior of the mollusk; and those which adhere to the shell, being irregular in shape and less uniform in color, are probably prominences or protuberances of the shell covered over with nacreous matter rather than true pearls. Other zoologists have indeed held (with Tertullian of old, who calls them "maladies of shell-fish, or warts"), that they originate in a diseased condition of the fish, which may not in all cases be aware of the presence of the foreign body within its frame. The latter theory is somewhat at variance with the speculations of a recent writer, who stands up stoutly for the intelligence and æsthetic development of the oyster, which, as he declares, is possessed of a heart, and is perchance not insensible to the tender passion!

As to the color of pearls, there has always existed great diversity of opinion. Sir Robert Reading, in his letter to the Royal Society, apparently attributes their hue to the central node or nucleus, affirming that pearls, if once of a dark tint, will never clear. But his theory has been completely upset by recent investigations, specimens having been found both in Scotland and Ireland, white without, but perfectly dark within; and pearls discolored by age have been sometimes restored by skilfully removing the outer layer of nacre altogether. Linnæus satisfactorily proved by a series of experiments on the fresh-water mussel of Sweden, that irritation, resulting, as we have said before, in a pathological process of nature, is the primary origin of the pearl being formed. He suggested a plan to the Swedish government of boring holes through the shell, and introducing a wire having minute grains of sand fixed thereon between the shell and the fish. His plan succeeded so far as to reward him with pearls to the value of 450*l.*, but proving unremunerative as a commercial venture on any large scale, it was finally abandoned. The industrious Chinese have long been in the habit of breeding pearl-mussels in tanks, and, following the same theory as that propounded by Linnæus, of introducing wires within the shell to which small shot or spherical pieces of shell are affixed. They do not, however, bore the shell of the mussel, but gently forcing open the valves, introduce the wire through the opening into the interior. At the end of a year, the particles so introduced are found covered over with a perfect coat of nacreous matter, and if left untouched for a year or two more, the object so coated over can hardly be distinguished from genuine pearls. Sometimes, small clay figures are inserted, which in process of time become similarly overlaid with nacre. We might suggest to zoologists the possibility of repeating these experiments with some of the Scottish pearl-mussels, which are identical with the Lapland species of Linnæus, and which could easily be kept in enclosed spaces traversed by running water.

But after the nearly universal belief that the nucleus of pearls is generally a particle of sand or grit accidentally lodg-

ed within the shell, the patient and straightforward researches of an able practical naturalist, Mr. Robert Garner, of Stoke-upon-Trent, have now almost conclusively set at rest the question of their origin and formation. Finding that the shore mussels near the estuary of the Conway were collected by the inhabitants of the district not only for food and bait, but also for the sake of an opaque pearl which they occasionally contained, he submitted some pearl-bearing specimens of these mussels, as well as of the true fresh-water species (*Alasmodon* or *Unio margaritifera*) from Llanwrwst and Bettws-y-coed, higher up the river, to a careful dissection and microscopic examination. We give the result in his own words, extracted from his very agreeable *Holiday of a Naturalist*.

"They (*i.e.* the pearls) are due to the irritation caused by the presence, in the mantle or shell-secreting envelope of the animal, of a minute parasite, a Distomus. Sometimes a little dark shelly matter, like the interior of the shell, is first deposited, but with the distomus within. Sometimes the parasite may be obtained with pearly plates adhering to it, or seen within a thin covering of pearly matter, or extracted entire from the pearly case. Occasionally, however, a pearl may be less than the parasite, and sometimes pearly prominences are to be seen within the valves, especially towards the posterior extremities; these may be due to other less common causes of irritation, but especially to a parasitical mite (*Atax*)."

We do not remember to have seen this apparently satisfactory solution of the formation of pearls mentioned with the prominence it deserves; and it should suggest to naturalists the expediency of subjecting pearls from other localities in Britain as well as these found in the oriental pearl-oyster (*Avicula margaritifera*) to more careful dissection and microscopic examination. This solution would explain the frequent occurrence of pearls in the viscera or muscles of the animal, where minute parasites or entozoa would be more likely than chance bits of sand or grit to effect a permanent lodgment. Mr. Garner does not mention whether the specimens he examined were generally spherical, or whether they partook of the irregular shape which so fre-

quently characterizes the pearls attached to the shell itself.

It will be a curious instance of the revolving cycle of fashion, should our British pearls again rise so far in estimation as to cause the marine treasures of Bahrein, Manaar, and Condatchy to be slighted in comparison, and should Occi-

dent instead of Orient pearls be quoted as typical of unsullied beauty and purity. Be this as it may, to all the pearl-fishers of Doon, Tay, and sister streams, we cordially address the kelpie's words which so perturbed the sacristan of Melrose as he rode the water—

“Good luck to your fishing!”

London Times.

THE WORKS AT JERUSALEM.

THE topographists and archæologists of the world have doubtless perused with deep interest the letters from Captain Wilson and Lieutenant Warren which from time to time have appeared in your columns on this subject, and which many newspapers in other countries have but reproduced. Though Jerusalem is now more than it has been for centuries a focus of inquiry for the student and of interest for thousands of Moslems, and for all Christians and Jews who read their Bibles, yet there has been undoubtedly a dull apathy about the whole subject which it is difficult to account for, and which is only now being removed by what you have published as to the feasibility of bringing again to light at least an image of the magnificent grandeur of the Holy City in ancient days. Four weeks spent in diligent work among the ruins here have shown me that to see them properly would need as many months of energetic investigation; but, as most travellers here have only a limited acquaintance with the subject and a brief time to enlarge their knowledge, it may be for the benefit of new tourists—and they are now arriving in batches of 20 at a time—to be told what can be very well seen even in a single day.

For this purpose Lieutenant Warren meets us in the morning early, clad in a blouse of genuine mud color, and a sergeant of Engineers carries long tapers for our dark promenade. Down the mouth of a square shaft a rope ladder is lowered until the brown bare legs of a swarthy native from Siloam can stand on the upper end. One by one our party lessens on the surface as each disappears underground, and our last glimpse of the upper world rests upon

two enormous stones in the massive wall of Moriah, and which, by their curved edge projecting, show that once an arch was there. Dr. Robinson was the first traveller to remark this, so it is called “Robinson's Arch,” and we are going down 50 feet below the present surface to see what can be found below of this old bridge at once hidden and protected by the *débris* of centuries.

The hole we are in is like a well, but it is lined with strong planks, and at the dark bottom our passage is through an opening as if into a kitchen grate, where we grope on all fours, with a hard knock on the head now and then, bending sideways too, as well as up and down, until suddenly the roof becomes rugged and crooked, indescribably contorted by angles, all of them the corners of well-cut stone. For here we are in the confused heap of huge voussoirs or arch-stones which, once high in the air, spanned gracefully the rocky vale between Zion and the Temple. At the siege of Jerusalem Titus parleyed with the Jews across this gorge, and then these stones were hurled down here, and with what a crash! Upon them, hidden by their own ruin, new buildings arose and gardens flourished. These also were laid low, and on the desolate mounds the present houses stand. The Jerusalem we see to-day is not the real Jerusalem. That is buried under 50 feet of wreck and confusion, but in its forced silence somehow it speaks eloquently, bidding the Christian and the Jew to heave its burden off, to open the dark to light and air, and to read in the covered relics the story of past times. Therefore we look up and around on these old stones, and seem to listen with an inquiring gaze, for nothing of their rich bold

masonry has been spoilt by this turmoil above. Old as they are, we notice among them one stone below the rest, and yet more hoary than the others. It is part of a still more ancient bridge across the rocky cleft, which then was steep at the sides, but now is filled up by dark silence. David in former days may have marched over here. Certainly many kings and prophets after him have trod upon these stones.

Tanks, cisterns, aqueducts, pavements, here open to us underground. Once we have got down we can scan by the magnesium light a subterranean city, the real city of Jerusalem. The labor of building this, and of now mining into it when buried, is forgotten in wonder as we gaze on the silent relics or wander about the caverns echoing a hollow voice. But for this we must be agile, like cats or monkeys, and follow Mr. Warren complacently crawling on his back through a dark crevice. Another great arch, called Wilson's, also now buried, may be visited without such gymnastics. This also spanned the same valley, and the rock-cut passage for troops may be followed as it winds among ample halls, until we are suddenly barred by the walls of a modern house, which is an end terribly prosaic for a romantic journey.

Here we are reminded of the numerous and great difficulties to be overcome before even one excavation of this kind can be made in Jerusalem, and of the many different people with whom Lieutenant Warren has to deal. First, there is the Supreme Government, then the local Pasha, the Pope, the Patriarch, or Archbishop of Christian sects, the Rabbi and Moslem too, the owners of the soil, the military, the tenants of the houses, the surrounding neighbors, the Consuls of various Powers, the excellent sergeants and corporals of English Engineers, the native workmen, and, finally, the British public, who, perhaps, expect that we should find at once, and in a city twenty times razed and as many times pillaged and harried when in rains, fine marble statues or golden censers, or even the manuscripts of the Bible. Relics such as these are, however, to be found chiefly in tombs or other sacred spots, and it is precisely there that prejudice or allowable sentiment

opposes to our search a barrier harder than porphyry. Even through these difficulties many curiosities have been sent to England by Lieutenant Warren, and nine cases of those newly found will be shipped in the steamer with me. Still these are not the main object of our search, though it must be allowed that the larger and more philosophic design of our explorations will always be more appreciated by those who come here and see what has been uncovered than by those who are at home and who see only the sculptures, pottery, or numismatic lore incidentally obtained and brought back to England.

Impressed more than ever with the importance, the extent, difficulty, and interest of the work, its necessary expense and permanent value, we climb again up the rope ladder. Daylight regained seems bright, cheerful, and warm, but somehow too garish also. No mind worth having but must have been stirred deeply by the sudden scene below. The thoughts down there are now like the dream of a past night, when we awake to a common workday morning, and soon the calm Moslem with his bare legs rolls up the ladder in a pile upon his back as we follow down the valley to "Job's Well." Near this Mr. Warren once wriggled through a dark hole in the rock and opened up a splendid tunnel. At each 200 feet are long sloping stairs from this to the ground above. Through each of these, now fully opened, we can look down and almost see the clear water which runs rippling at the bottom, coming whence no man can tell, but it wells up plentifully at the end, and then runs along the valley till the roots of thirsty olive-trees lap it up dry, and you may ride on for hours below in the course of "the brook Kidron" only upon hot stones bleached white in the sun.

A little farther up this valley we look into a deep cave where the Virgin's fountain is running in smooth pools of rock. A network of water channels was once under Jerusalem, perhaps not less wonderful than the towers and pinnacles and palaces in the daylight above. Few men have dared to follow Mr. Warren in the amphibious tour of the Jerusalem watercourses. In this one, for instance, the water comes first from

the Pool of Siloam, and it swells up high at uncertain moments as you squeeze through a passage in the dark, wet up to the shoulders, and where the chin must be raised at "high tide" to keep nose and mouth from being filled. Mr. Warren, indeed, seems to have a subterranean turn of mind, and it is fortunate when one's duty and one's inclination are both in the same direction. To-day we were privately visiting the Haram enclosure, where the level sward of green is gorgeous with spring flowers in bouquets here and there round the old pillars or marble blocks. Suddenly Mr. Warren resolves to raise one particular stone of these, and ropes, levers, and ladders were speedily at work. The old Sheikh of the Temple Area (a sort of Moslem Dean and Chapter in one man), intensely bigoted, but outwardly complying, sits restless on the grass, now and then groaning deeply, as he sees the Englishman disappear into a great cavern, the last of the cisterns examined in this hollow-sounding, grassy square. After measuring this below, by swinging to and fro on a rope in the hollow gloom fitfully lit up by his magnesium light, Mr. Warren entered a small hole in the turf above, where one could scarcely expect a terrier to go in, taking leave of us all, with a good-humored joke to the anxious Sheikh, who forced a grim smile into his face, evidently half-fearing, half-worshipping the mysterious intruder he was set to watch. After all, a touch of craziness insures respect among these Moslems, and often I found myself that the Arabs dared not injure the being who could float in a boat alone. After 20 minutes of suspense we heard a cheerful "Hallo!" far off and in a totally unexpected direction, and there was Mr. Warren erect again on the surface some hundred yards away, having traversed a new passage under the grass in total darkness, and creeping on his side. A bit of magnesium was given to the grave Sheikh in reward for his easy guardianship. The old man took it like a child, and thanked the giver, but with a more audible groan.

Next we can enter a shaft near the "Golden Gate" of the Temple, where two beautiful arches in the exterior wall mark the exact spot at which the Mos-

lems are sure the "Nazarenes" must one day enter the Holy City finally to conquer all.

What management and diplomacy had to be used to open a shaft in such a place! Nor can we wonder that the Turk should refuse a stranger leave to dig quite close to his cherished *sanctum*. Even the Dean of Westminster, so valuable a co-operator on the committee of the Palestine Exploration Fund, would be reluctant to allow a Turkish officer of Engineers to dig by the east buttresses of Westminster Abbey. So we enter the shaft in the Valley of Jehoshaphat with a piquant curiosity, and deep down it goes through acres of shingle and rubbish, scattered here thick for ages, till our feet are in the very rock itself where Solomon's builders laid their huge stones noiselessly. A gallery from this for 70 ft. finds the rock surface sloping upwards. In five minutes, by the aid of a few sketches and sections, we can picture to the mind that noble and sheer cliff, which is here as grand as ever, but only covered by the dusty heaps we see outside. Weeks must be spent, though, in mining by steps along this rocky steep. At any moment the pickaxe may strike on a hewn-out gateway. Already, while I write, it has disclosed a mysterious pillar, pendent and deftly marked by signs; and as each spadeful of brown earth is dug away the hopes are raised of some long-lost inscription being uncovered while we stoop with pale candles to spy out what is at once so old and so new.

The worst of it is that sights like this can be seen only on the spot. We cannot bring home to England the uncovered rock of Moriah. By raking over the *débris* of centuries once more, no doubt there would be numerous relics found which might be portable, and being shown in London would stimulate the generosity of friends who listen with apathy now to descriptions of what is doing here for the discovery of Jerusalem itself, rather than of the ornaments of the Jews. These detached relics and the *débris* which entombs them are the very things which must be barred out, and so are concealed at present by the wood lining of the shaft which is sunk through them all to get into a deeper knowledge of the great buildings as they stood.

Many visitors, and from all parts of the world, descend these shafts during the travellers' season. Ladies can be lowered down in chairs. Strong ropes are used for safety when the timid might be nervous on the ladder alone, and large parties at a time, even thrice in a day, have the benefit of Lieutenant Warren's kind and valuable explanations by candle-light, so that gradually there will be interest excited on this subject among intelligent people everywhere. But the earth we dig in is often so insecure that it would instantly collapse if without support, and the wood required for this is so expensive here that the frames of timber cannot be spared from constant successive employment in other shafts. Therefore, many of the most curious galleries opened up have had to be filled again, and only their records remain in picture and photograph and the memories of travellers. Many shafts, again, are sunk with only negative results, and after weeks of toil, amid danger, and at great expense, it is discovered simply that "nothing is there." But this "nothing" is like the cipher among figures. Some day, perhaps even tomorrow, the appropriate integer will be discovered which converts the cipher, useless by itself, into the record of an important discovery, like a 0 read with 9 before it, instantly becoming nearly 100. Of course I am not now epitomizing what has been explored above ground or below by the committee, but what can be seen even in a brief visit to the dark beneath. Besides much in the Holy City, much has been most carefully examined in country parts, and the map of Palestine, so long imperfect, is now being corrected or completed. Each traveller who has the object at heart may add, as many do, to the gradual but accurate knowledge of the land, the buildings, the manners, the plants, the animals, the climate, and the former life that belong to this country. Some who are far off can help by their purses, others by their pencil or their pen, and even the canoe-man by his paddle. But, after all our walks by daylight among the inexhaustible ruins above ground, there is still the conviction abiding that the roots of our problem are in the deep below, and that much of it must be solved by candle-light.

It is hard exercise, but healthful and appetizing, to climb up and down these

shafts; yet we may include in our day's work a visit to shaft 52, its number telling how many others must be left unseen. This goes straight through the rubbish at the south-east corner of the old wall of Jerusalem. Above us, rising proudly still, is the ancient angle of the Temple area, which overhangs the valley steep below, 200 feet. Most likely it was on this, or on a pinnacle near, that our Lord was placed in his threefold temptation. Even now the wall is 70 ft. high above ground, the most expressive feature of the Holy City seen from without in the profile of Jerusalem. At a depth of nearly 90 ft. below the present ground, near the wall, we reach at last the corner stones of the venerable building, so that what we have looked up to before as lofty was seen only from a false base of rubbish, heaped up high and concealing the real rock, and robbing thus the Haram wall of more than half its veritable height. Even above the present surface the stones are huge as well as ancient, and at the bottom they are equally massive and beautifully cut. The rock itself is bared at last upon which the marvellous structure rests. Where each lowest foundation stone lies upon it we can see the rock has been levelled to receive its brethren. Here, and only here, are chippings from the chisel. The stones, indeed, were finished by Divine command before they were placed, but the mason's tool had to be used on the live rock as it lay.

In one part there had been even then some rubbish alongside, and this had been cut out to admit the lowest stones. Among this ancient *débris* I was fortunate enough to pick out the tooth of a camel, which must have lived among the Jebusites before even this old wall was built.

It is on these lowest courses of stones, most of them very large—one more than 17 ft. long—that you can see by candle-light the curious letters, or, at any rate, characters, in red paint, of which full particulars have been published in your columns. These letters are numerous, distinct, and large, and others are actually cut in the stone, but all of them are complete puzzles to the best scholars here, and the decision of the English, German, and French *savans* as to their meaning is awaited with deep interest.

The color of the pigment used for

these letters varies in appearance from time to time as you revisit them. Perhaps a few weeks more may efface some of these marks entirely. Meanwhile, I determined in my last visit to them to-day to imitate the actual tints as well as possible by water-colors and on paper. On bringing up these copies to daylight it was at once remarkable how differently they appear in the sun's rays from what they do in the galleries below, where only candles or the magnesium light have shown them to the curious visitor.

It is disheartening to be told that, from want of funds to keep this shaft open and the wood lining of it properly renewed, even this very interesting sight must be only temporary, and that the approach to it must be closed again in a few weeks from this time, for the wood will not last much longer safely. Meanwhile, the travellers here have availed

themselves of a precious opportunity. An American lady was lowered down the shaft in a chair last week, the first lady who has seen these ancient writings. Mr. Simson, whose drawings are so widely known in the *Illustrated London News*, from the Crimea, and Abyssinia, and the Brindisi route, descended with his sketch-book yesterday. It is hoped that the Marquis of Bute will go down the shaft this week; and perhaps some man who has heart, and head, and money will enable the "Palestine Exploration Fund" at least to keep the shaft open and in secure repair, even if it be left to our posterity to clear away all the rubbish that clogs the splendid wall of Jerusalem, and to lay open to the sun, and to the eyes of the world, the long-covered splendors which are still below, after so many wars and fires and razings, and the gnawing of ruthless time.

ROB ROY.

All the Year Round.

NATURAL GHOSTS.

WITHOUT saying a word for or against the supernatural appearance of dead and dying men, ministering spirits, bad spirits, and all the demons that are found in fire, air, flood, or underground, let us give a good word to the ghosts that are no ghosts. Some of them are quite natural and wholesome, seen by healthy persons, and often by more than one person at the same time. Others are natural and unwholesome, seen usually by sick persons, and, in nearly all cases, by one person only. The familiar form of the healthy, natural apparition is our good old friend, our other self, whom we have had the pleasure of seeing a great many times in print, the giant of the Brocken. I climb the Brocken to see the sunrise on a calm morning, and standing on the granite rocks known as the Tempelskanzel, observe that the other mountains towards the south-west lying under the Brocken are covered with thick clouds. Up rises the sun behind me, and forth starts the giant, five or six hundred feet high, who bestrides the clouds for a couple of seconds and is gone. To see one's shadow in this fashion there needs a horizontal sunbeam and a bank of vapor of the right

sort in the right place. We may go up the Brocken at sunrise a dozen times and hardly have a chance of finding sunbeam and vapor-bank disposed to favor us with the raising of this ghost. The ghost of Cæsar that appeared to Brutus at Philippi is as much of a commonplace as the spectre of the Brocken, and as natural. Was not Hobbes of Malmesbury a great philosopher, who ought to know? "We read," says Hobbes, "of Marcus Brutus (one that had his life given him by Julius Cæsar, and was also his favorite, and notwithstanding murdered him) how at Philippi the night before he gave battle to Augustus Cæsar he saw a fearful apparition, which is commonly related by historians as a vision; but considering the circumstances, one may easily judge to have been a short dream. For sitting in his tent, pensive and troubled with the horror of his rash act, it was not hard for him, slumbering in the cold, to dream of that which most affrighted him; which fear, as by degrees it made him awake, so also it must needs make the apparition by degrees to vanish; and having no assurance that he slept, he could have no cause to think it a dream or anything

but a vision." Then there is moonshine. It makes many things half visible, which timid folks interpret into shapes of terror; burglars, perhaps, if their fears are of the mundane sort; and if their taste incline to the eerie, when the light is dim and silence rules, they will know how to suspect,

In every bush a hovering shade,
A groan in every sound.

Moreover, there is *hocus-pocus* in its regular commercial aspect, as it was abroad in the days of the Egyptians, and as it is at home in these present days. It is not difficult to understand how the Egyptian priests showed visions on their temple walls, or reflected pictures from the surface of great bowls of water. The devils shown by a conjuror to Benvenuto Cellini were doubtless let loose from a magic lantern. Some drugs give a man spectral illusions. A conjuror offered Dr. Alderson a prescription for a mixture of antimony, sulphur, and other things, which should cause the person taking it to be haunted by spectres.

A philosopher older than Hobbes, the poet Lucretius, supposed that all ghosts were natural productions, being merely thin pellicles cast off from the body.

Next, for 'tis time, my Muse declares and sings,
declares and sings through the medium of Creech,

What those are we call images of things,
Which, like thin films, from bodies rise in streams,
Play in the air, and dance upon the beams:
By day these meet, and strike our minds and fright;
And show pale ghosts and horrid shapes by night:
These break our sleep, these check our gay delight,
For sure no airy souls get loose, and fly
From Hell's dark shades, nor flutter in our sky:
For what remains, beyond the greedy Urn,
Since soul and body to their seeds return?
A stream of forms from every surface flows,
Which may be called the film or shell of those:
• Because they bear the shape, they show the frame
And figure of the bodies whence they came.

About the middle of the seventeenth century the doctrine of Palingenesis prevailed. This was a chemical explanation of the theory of Lucretius. It asserted that if a flower were burnt and pulverized, a salt might be obtained which was

the essential part of the flower; that on mixing this substance with something which was not disclosed, and applying heat, a spectral flower would arise, corresponding to that which was burnt. This was explained by supposing that the particles of the salt, when heated, attracted one another, and flew off into the respective places they had occupied when in the living plant, so that they thus formed a shadowy representation of it. That being taken for an established fact, it was easy enough to apply it to the human body, which, when fermenting underground, threw off such particles of the essential salt to rise into the air, be drawn into their old relative positions, and thus form

horrid apparitions tall and ghastly,
To walk at dead of night, or take their stand
O'er some new-opened grave.

But why the winding-sheet threw off this salt, and not the coffin—for the ghosts always came up dressed in their grave-clothes, never cased in their coffins—Palingenesis has not explained.

Another theory, metaphysical, not chemical, made Fancy an incomprehensible material thing lodged in the middle lobe of the brain, which acts the part of a servant to the mind in arranging together the different material ideas brought to the brain by its other servants. The over-zealous industry of this servant in working after the others were gone to bed, was supposed to produce the appearance of spectres, which were thus taken to be, in a very literal sense, the workings of Fancy.

Now we come to the unwholesome class—the natural ghosts; ideas made unusually vivid by some morbid condition of the mind or body. Ghosts of this kind are as natural as those of the other class. Ideas are copies of sensations, only less intense. If any unhealthy excitement adds to the intensity, they may be indistinguishable from impressions of things actually seen and heard. The writer of this, having seen a large number of ghosts, and heard many ghostly voices in his childhood and youth, has, as a wise man once put it, seen too many ghosts to believe in them. And yet how clear and distinct they were. A long flaming sword, for example, in the air at noon-day over London, at the time of the chol-

era visitation of 'thirty-one, or thereabouts; and not only a flaming sword, but the clouds arranged in a frame about it to bring out the picture, as they certainly were not really arranged in the sky. Bah! the pattern of the sword was that chosen by the artist of the first illustrated edition of *Paradise Lost*, whose pictures were often pored over by the young natural-ghost-seer; and it was a shape reflecting little credit on the genius of the heavenly swordsmiths, if they have swordsmiths in heaven.

Take the third experiment of Sir Humphrey Davy in an atmosphere of nitrous oxide. He says, "A thrilling, extending from the chest to the extremities, was almost immediately produced. I felt a sense of tangible extension, highly pleasurable, in every limb; my visible impressions were dazzling, and apparently magnified. I heard distinctly every sound in the room, and was perfectly aware of my situation. By degrees, as the pleasurable sensation increased, I lost all connexion with external things; trains of vivid visible images rapidly passed through my mind, and were connected with words in such a manner as to produce perceptions perfectly novel. I existed in a world of newly connected and newly modified ideas. When I was awakened from this semi-delirious trance by Dr. Kinglake, who took the bag from my mouth, indignation and pride were the first feelings produced by the sight of the persons about me. My emotions were enthusiastic and sublime; and for a moment I walked around the room, perfectly regardless of what was said to me. As I recovered my former state of mind, I felt an inclination to communicate the discoveries I had made during the experiment. I endeavored to recall the ideas—they were feeble and indistinct."

Inhalation of nitrous oxide increases fulness of the pulse, expands the blood. A like effect is produced by the febrile miasma of Cadiz, in which the spectral impressions are of a painful character. Suppose we say, then, that expansion of the blood is favorable to the producing of spectral impressions. If not that, some other fact as natural, accounts for the appearance of spectres in hectic and other fevers. The ghosts seen by Nicolai, the philosophical bookseller of Berlin, disappeared gradually on the appli-

cation of leeches. Spectral impressions may result also from direct irritation of the brain, or from a high state of nervous irritability acting upon the body generally. The spectres will agree mostly with the mind they spring from. A philosophical man like Nicolai has visions of men, dogs, and horses, such as he would see in daily life. Others, who have their minds full of supernatural tales, and who associate with darkness, instead of nature's rest, the spirit's unrest, will see the sort of ghosts they occupy their minds with. Others, again, whose philosophy leads to a faith in visible intercourse between the living and the dead, will not fail to obtain excellent corroborations of their doctrine.

When supernatural forms are not repetitions of familiar shapes, but follow current superstitions, it has been always observed that they correspond to the forms adopted by popular belief from familiar paintings and sculptures. The witches of Lorraine, who professed to be familiar with devils, were questioned particularly as to the appearance of these devils by M. Rémy, the commissioner for their trial. They had simply realized them by the rude allegorical painting and sculpture of the middle ages. They said they were black-faced, with sunk but fiery eyes, their mouths wide and smelling of sulphur, their hands hairy, with claws, their feet horny and cloven. The cloven foot comes of a tradition that the devil was in the habit of appearing to the Jews in the form of a hairy goat. Saints, when they appear, correspond in the same way with the conventional form of church painting and sculpture. Visions seen in the ecstasies of saints themselves were commonly true visions; natural, as results of an overstrained mind in a wasted and often tortured body. The visions seen by the dying may be explained also by the condition of the body in the last stage of many diseases, when the commonness of spectral delusions has given rise to a strong faith in our frequent visible communion with angels and departed spirits in the hour of death.

Next to sight, hearing is the sense most frequently imposed on, and no sound is so commonly imagined as the call of a familiar companion. Dr Johnson fancied he heard his mother call

"Sam," when she was a hundred miles away, and was much disappointed when nothing ensued. That call by a familiar voice was a frequent experience of the present writer. It was commonly a home voice, and a loud, clear, and abrupt monosyllabic call. But he has heard the voice of a brother miles away, speaking as from behind his shoulder in a college library, and turned to answer in a voice itself so insensibly subdued to harmony with the impression, as considerably to surprise a fellow-student who was standing near. But the delusions of hearing were, in his case, not confined to voices; the sound of opening doors within the bedroom at night, when there was no door opened, and other such tricks on the ear, were also not uncommon, but these (though not the sudden voices, which seemed to be connected with some momentary leap of the blood, as in the sensation that one has sometimes when going to sleep, of falling suddenly with a great jolt) were always to be

explained by traceable relation to a thought within the mind.

Next to hearing, touch is said to be the sense most frequently imposed on; as when people have fancied themselves beaten by invisible or visible fiends, and felt considerable pain from it. The present writer can remember in his own ghostly experience but one delusion of the sense of touch. It was associated with delusion of hearing, and repeated nightly for a week or ten days. Sometimes the sense of smell is deceived, as when the spectral sight of a demon is joined to a spectral smell of brimstone. Considering how often people are saying that they "fancy they smell" something, one might think play upon this sense to be more common than it is. Least liable to delusion is said to be the sense of taste. Thus, a lunatic mentioned by Sir Walter Scott, fancied his porridge dinner to consist of every delicacy, but complained that every thing he ate tasted of porridge.

The Spectator.

HEAT FROM THE MOON.

A LONG-VEXED question—one which astronomers and physicists have labored and puzzled and even quarrelled over for two centuries at least—has at length been set at rest. Whether the Moon really sends us any appreciable amount of warmth has long been a moot point. The most delicate experiments had been tried to determine the matter. De Saussure thought he had succeeded in obtaining heat from the moon, but it was shown that he had been gathering heat from his own instruments. Melloni tried the experiment, and fell into a similar error. Piazzi Smyth, in his famous Teneriffe expedition, tried the effect of seeking for lunar heat above those lower and more moisture-laden atmospheric strata which are known to cut off the obscure heat-rays so effectually. Yet he also failed. Professor Tyndall, in his now classical "Lectures on Heat," says that all such experiments must inevitably fail, since the heat rays from the moon must be of such a character that the glass converging-lens used by the experimenters would cut off the whole of the lunar heat. He

himself tried the experiment with metallic mirrors, but the thick London air prevented his succeeding.

The hint was not lost, however. It was decided that mirrors, and not lenses, were the proper weapons for carrying on the attack. Now, there is one mirror in existence which excels all others in light-gathering, and therefore necessarily in heat-gathering power. The gigantic mirror of the Rosse telescope has long been engaged in gathering the faint rays from those distant stellar cloudlets which are strewn over the celestial vault. The strange clusters with long out-reaching arms, the spiral nebulae with mystic convolutions around their blazing nuclei, the wild and fantastic figures of the irregular nebulae, all these forms of matter had been forced to reveal their secret under the searching eye of the great Parsonstown reflector. But vast as are the powers of this giant telescope, and interesting as the revelations it had already made, there was one defect which paralyzed half its powers. It was an inert mass well poised;—in-

deed, so that the merest infant could sway it, but possessing no power of self-motion. The telescopes in our great observatories follow persistently the motions of the stars upon the celestial vault, but their giant brother possessed no such power. And when we remember the enormous volume of the Rosse Telescope, its tube—fifty feet in length—down which a tall man can walk upright, and its vast metallic speculum weighing several tons, the task of applying clock-motion to so cumbrous and seemingly unwieldy a mass might well seem hopeless. Yet without this it was debarred from taking its part in a multitude of processes of research to which its powers were wonderfully adapted. Spectroscopic analysis, as applied to the stars, for example, requires the most perfect uniformity of clock-motion, so that the light from a star, once received on the jaws of the slit which forms the entrance into the spectroscope, may not move off them even by a hair's breadth. And the determination of the moon's heat required an equally exact adaptation of the telescope's motion to the apparent movement of the celestial sphere. For so delicate is the inquiry, that the mere heat generated in turning the telescope upon the moon by the ordinary arrangement would have served to mask the result.

At enormous cost, and after many difficulties had been encountered, the Rosse reflector has at length had its powers more than doubled, by the addition of the long-wanted power of self-motion. And among the first-fruits of the labor thus bestowed upon it, is the solution of the famous problem of determining the moon's heat.

The delicate heat-measurer, known as the thermopile, was used in this work, as in Mr. Huggins' experiments for estimating the heat we receive from the stars. The moon's heat, concentrated by the great mirror, was suffered to fall upon the face of the thermopile, and the indications of the needle were carefully watched. A small but obvious deflection in the direction signifying heat was at once observed, and when the observation had been repeated several times with the same result, no doubt could remain. We actually receive an appreciable proportion of our warmth-supply from "the

chaste beams of the wat'ry moon." The view which Sir John Herschel had long since formed on the behavior of the fleecy clouds of a summer night under the moon's influence was shown to be as correct as almost all the guesses have been which the two Herschels have ever made.

And one of the most interesting of the results which have followed from the inquiry confirms in an equally striking manner another guess which Sir John Herschel had made. By comparing the heat received from the moon with that obtained from several terrestrial sources, Lord Rosse has been led to the conclusion that at the time of full moon the surface of our satellite is raised to a temperature exceeding by more than 280° (Fahrenheit) that of boiling water. Sir John Herschel long since asserted that this must be so. During the long lunar day, lasting some 300 of our hours, the sun's rays are poured without intermission upon the lunar surface. No clouds temper the heat, no atmosphere even serves to interpose any resistance to the continual down-pour of the fierce solar rays. And for about the space of three of our days the sun hangs suspended close to the zenith of the lunar sky, so that if there were inhabitants on our unfortunate satellite, they would be scorched for more than seventy consecutive hours by an almost vertical sun.

There is only one point in Lord Rosse's inquiry which seems doubtful. That we receive heat from the moon he has shown conclusively, and there can be no doubt that a large portion of this heat is *radiated* from the moon. But there is another mode by which the heat may be sent to us from the moon, and it might be worth while to inquire a little more closely than has yet been done whether the larger share of the heat rendered sensible by the great mirror may not have come in this way. We refer to the moon's power of *reflecting* heat. It needly hardly be said that the reflection and the radiation of heat are very different matters. Let any one hold a burnished metal plate in such a way that the sun's light is reflected towards his face, and he will feel that with the light a considerable amount of heat is reflected. Let him leave the same

metal in the sun until it is well warmed, and he will find that the metal is capable of imparting heat to him when it is removed from the sun's rays. This is radiation, and cannot happen unless the metal has been warmed, whereas heat can be reflected from an ice-cold plate. There has been nothing in the experiments conducted by Lord Rosse to show by which of these two processes the moon's heat is principally sent to us; nor do we know enough of the constitution of the moon's surface to estimate for ourselves the relative proportions of the heat she reflects and radiates towards us.

We do not mention this point from

any desire to cavil at the results of one of the most interesting experiments which has recently been carried out. But the recent researches of Zöllner upon the light from the planets, has shown how largely the surfaces of the celestial bodies differ as respects their capacity for reflecting and absorbing light, and there is every reason to infer that similar peculiarities characterize the planets' power of absorbing and reflecting heat. The whole question of the heat to which the moon's surface is actually raised by the sun's heat depends upon the nature of that surface, and the proportion between its power of absorbing heat or reflecting it away into space.

Macmillan's Magazine.

THE NEW TESTAMENT UNDER A NEW ASPECT.*

BARON TAUCHNITZ has crowned the first thousand volumes of his well-known "Collection" by an edition of the New Testament, containing a feature at once so new and so admirable as to deserve a few words of gratitude from every intelligent Englishman, whether connected or unconnected with the profession of theology.

Every one knows that the English New Testament is a translation from Greek. But every one does not know that the Greek from which the translation was made is a very imperfect, inaccurate, redundant representation of the original Gospels, Acts, Epistles, and Revelation, as they left the hands of their authors. The printers and scholars who, about the year 1550, at the instigation of Erasmus, first put the Greek Testament into type, did the best they could with the materials at their disposal. They collected and compared all the manuscripts within reach, and they formed an edition (a "text," as the technical word is) which did them credit, and the translations of which have furnished comfort and hope to millions of men and women since their day. But time went on, and fresh manuscripts were discovered, older and more carefully written than those which Erasmus

and Stephens had employed; and a number of passages appeared in which their edition was contradicted by more trustworthy readings. Still the original edition continued to be printed and used as a standard, and acquired the name of the "Received Text;" and all the corrections as they were discovered day by day were not employed to alter this text, but were added to it as notes, by which at some future time, when all the ancient manuscripts had been found, and all the quotations of the Testament in the early Fathers of the Church had been examined, and every conceivable source explored, and men knew everything that could be known on the subject, a more correct edition might be made, which should then supersede the old "Received Text."

In process of time, as libraries were explored and Oriental monasteries rifled, three manuscripts came to be discovered of earlier date and more exact execution than any others. The first of these, known as the "Vatican MS.," is in the Vatican at Rome; the second, the "Alexandrine MS.," in the British Museum; and the third, the discovery of our own generation, the "Sinaitic MS.," is at St. Petersburg. The date at which the first and third were written is somewhere between the year of our Lord 330 and 350; the second is a century or so later, say 450. These three manuscripts are now admitted by those best qualified to

* Collection of British Authors, Tauchnitz Edition.—Vol. 1,000: The New Testament. London: Williams & Norgate.

speak on the subject, to contain the nearest approach which we yet possess, or are likely to possess, to the original writings of the Testament. No doubt there is a great difference between even these early copies and the books as they left the hands of their authors. If we could compare the original of Gospel or Epistle with what it had become after only 250 years of copying and recopying, we should find an immense difference. It is inevitable. Even in printing, even in our day, when verbal accuracy has become almost a religion, mistakes occur in reprints; some sentences are added, others omitted, others distorted. But where books were reproduced by hand-writing, and where minute accuracy was not understood or valued, and where copyists were either over-zealous or very ignorant, the chances must have been immense, overwhelming, against any copy being exactly like that which it was copied from. We shall understand this a little better presently. Now, what Baron Tauchnitz has done—with the help of Professor Tischendorf, the most eminent scholar of our day in this line—is this. He has reprinted the New Testament exactly as it stands in the English Bible; and he has put at the bottom of the page all the variations between it and the three great copies just spoken of. And all this in English—that is the “new and admirable feature” of which I spoke at the opening of my paper. Scholars have long been familiar with these things; but until now this information has not been brought within the reach of ordinary English men and women; nor has it been published at all at so insignificant a price or in so clear and convenient a form. I shall indicate presently one respect in which I think the book may be still further improved, but meantime I will give a few instances of the nature of the corrections which this new edition discloses, and which are most obviously interesting:—

The first thing that strikes one on looking at the notes at the bottom of these pages is how often the sign “omit” occurs; in other words, how large a proportion of the differences consists of additions to the original. There are many transpositions of words; here and there also words have to be added which have dropped out in the process of copying.

But these are not nearly so many in amount as those which are marked as redundant.

These redundances are of two kinds. First and most numerous are those which appear to have had for their object to elucidate or confirm the text. The owner of a copy of the Gospels, say in the 5th or 6th century, observes that a sentence is obscure and liable to be misunderstood for want of a word of explanation; or a text from the Old Testament is quoted, and, as he thinks, quoted wrongly; or a pronoun is given where he conceives that the proper name would be more intelligible; or the name of a place or person appears to want explanation; or a saying or narrative is stated in different words from the parallel passage in another Gospel. In these and many other cases, what so natural as to seize the pen and add the correction or the supplemental words? And thus in each of these cases (and many others which do not fall within my rough general divisions) the explanatory word has been inserted, the quotation has been corrected to agree with the passage quoted from, the proper name has been substituted for the pronoun, the narrative has been altered to suit the parallel passage, and so on. Sometimes this would be done in the margin, sometimes in the body of the work. In process of time, the manuscript with its alterations went into the hands of a copyist, who then, according to his lights or his bias, inserted the whole or part of the alterations, possibly with some further additions of his own, all which from that day forward became in that uncritical age indistinguishable and inseparable from the original work. I will give instances of each kind of addition before proceeding further.

1. Words added to a sentence to complete and strengthen the sense or make it more intelligible: as, for example,—

Matt. xiii. 51, “*Jesus saith unto them, Have ye understood all these things?*”

Mark iii. 5, “*And he stretched it out, and his hand was restored whole as the other.*” v. 40, “*He taketh the father and mother . . . and entereth in where the damsel was lying.*”

Luke vii. 10, “*And they that were sent, returning to the house, found the servant whole that had been sick.*”

John xi. 41, "Then they took away the stone from the place where the dead was laid." xii. 1, "Then Jesus came to Bethany where Lazarus was which had been dead."

Acts xxiv. 15, "That there shall be a resurrection of the dead, both of the just and unjust." 26, "He hoped also that money should have been given him of Paul, that he might loose him."

Occasionally these additions have a theological motive, as in Luke iv. 41, where "Christ" has been inserted—"Thou art Christ the Son of God;" or John ix. 35, where "Son of God" has been substituted for "Son of Man."*

But by far the largest number of additions under this head consist of single words put in to remedy halting sentences or obscure construction: "saying," "certain," "yet," "also," "unto them," "unto him," and the like. It is hardly too much to say that one can track the particular editor (as we should say) who made this class of additions almost verse by verse along the pages of the Gospels, and can trace his nervous anxiety lest any of the sacred words he loved so dearly should be misunderstood or perverted for want of his too-careful additions. The pages literally teem with his affectionate touches. In the ninth chapter of Matthew, for instance, there are ten such insertions:—

2 and 5, "Thy sins be forgiven thee." 9, "As Jesus passed forth from thence." 10, "Many publicans and sinners came and sat down." 12, "When Jesus heard that, he said unto them." 14, "Why do we and the Pharisees fast oft?" 24, "He said unto them, Give place." 27, "Two blind men followed him, crying." 31, "Spread abroad his fame in all that country." 32, "Brought to him a dumb man." 35, "Teaching in their synagogues, and preaching the gospel."

The four consecutive verses 47 to 50 of Luke viii. contain four additions of this kind, namely: "She declared unto him before all the people." "He said unto her, Daughter, be of good com-

fort." "Saying to him, Thy daughter is dead." "He answered him, saying, Fear not."

So also in Mark i. 40, "Beseeching him and kneeling down to him, and saying." 41, "And touched him, and saith unto him, I will." ii. 5, "Son, thy sins be forgiven thee." 8, "He said unto them, Why reason ye?"

Luke xx. 24, "They answered and said, Caesar's." 34, "Jesus answering said." xxi. 2, "And he saw also a certain poor widow." 8, "Go ye not therefore after them."

But we need not go to the 5th and 6th centuries for examples of this. The italics in our own Bibles—explanatory words added by the translators with the same pious intention as those just spoken of, and as often unnecessary—furnish instances of the very selfsame things.

2. We now come to words added to complete a quotation, or bring a statement into harmony with a parallel passage. Instances of these are the quotation from Isaiah in Matt. xv. 8, "This people *draveth nigh unto me with their mouth, and honoreth me with their lips;*" and the statement in Mark v. 7, cried with a loud voice and said, *What have I to do with thee, Jesus, thou Son of the most high God?* which is possibly completed from the parallel passages in Luke and Matthew.

3. Pronouns displaced for the proper name of the person referred to are incessant: as Matt. xv. 30, "Cast them down at *Jesus'* [his] feet;" Mark i. 41, "And *Jesus* [he], moved with compassion;" Luke x. 21, "In that hour *Jesus* [he] rejoiced;" John iii. 2, "The same came to *Jesus* [him] by night;" Acts xi. 25, "Then departed *Barnabas* [he] to Tarsus;" Luke xxii. 62, "And *Peter* [he] went out."

4. Additions to explain a name of place or person are also occasionally found: as John ix. 2, "Go to the pool of Siloam and wash;" xii. 4, "Judas Iscariot, *Simon's son*, which should betray him;" Luke xi. 29, "the sign of *Jonas the prophet*."

5. Alterations bearing on the topography of the Holy Land are rare and not very material. The chief one is the substitution of Magdala for Magadan in Matt. xv. 39; Magdala having probably crept into the copies from a desire to

* In John xix. 40, the Alexandrine MS. substitutes "God" for "Jesus," so that it is perhaps by a mere accident that we escaped having in our English Bibles the very inconvenient expression, "Then took they the body of God, and wound it in linen clothes."

connect it with "Mary the Magdalene." In Mark vii. 31, a change of some moment is made by the alteration of "departing through the coasts of Tyre and Sidon" from "departing from the coasts of Tyre he came through Sidon,"—showing that the road was the same then as now.

The transition is easy from these small additions to such longer and more important ones as Matt. xxvii. 35, or Mark xv. 28, which may have arisen from the anxiety of a commentator to square the facts of the New Testament with the prophecies of the Old; or Mark ix. 44 and 46, which have probably been inserted to correspond with verse 48 and with Isaiah lxvi. 24; or Luke xvii. 36, added from Matt. xxiv. 40; or Matt. xii. 47, added from Luke viii. 20.

In all the cases of which these are types, there is some motive, more or less obvious, at the bottom of the addition. But it is more difficult to explain the presence of other passages, such as Matt. xvi. 2, 3, Luke xxii. 43, 44, or John v. 4, which are not found in either of the most ancient copies, and for which no authority or hint appears in other parts of the Gospels.

Still more remarkable is the next class of additions, which are in all respects truly startling. I mean those which contain some of the most characteristic and "Christian" sentiments in the whole of the New Testament. There are few who, if asked to name the incident which most clearly embodied the justice, mercy, and tenderness of Christ, and supplied us with the most precious traits of His personal manners, would not quote the story of the woman taken in adultery. And yet there can be little doubt that this story—John vii. 53 to viii. 11—did not exist in the original Gospel; in fact, did not make its appearance in any edition before the middle of the 5th century. And there are several other passages, which, though shorter, are hardly less characteristic than is this story. The beautiful narrative in Luke ix. 54–56 loses not only the reference to the act of Elijah, which has always seemed so appropriate to the locality, but it loses what seems to be the very kernel of its teaching, the whole of the words printed in italics being an interpolation in copies made after the mid-

dle of the 5th century:—"And when his disciples James and John saw this, they said, Lord, wilt thou that we command fire to come down from heaven and consume them, *even as Elias did?* But he turned and rebuked them, *and said, Ye know not what manner of spirit ye are of, for the Son of Man is not come to destroy men's lives, but to save them.* And they went to another village."

The precept, so parallel to this in spirit, contained in Mark xi. 26, which has formed the motive of so many a prayer, and the text of so many a sermon—"For if ye do not forgive, neither will your Father which is in heaven forgive your trespasses,"—is in like manner an interpolation of later date than either the Sinaitic or Vatican MS. Even the utterance of our Lord on the cross—Luke xxiii. 34, "Father, forgive them, for they know not what they do"—must pass into the same category, and be erased from the original draft of the record. To the same purport are the words in the Sermon on the Mount, in Matt. v. 44—"Bless them that curse you, do good to them that hate you, and pray for them which despitefully use you," which, although they lie at the very foundation of Christian morality, must henceforward be swept away.

I take the opportunity to notice a saying attributed to Christ, which though it has escaped being inserted in the received text of the Testament, and is therefore not in our English Bibles,—and rightly, since as it is not found in any of the three manuscripts which form the basis of our examination, it can hardly have been written by the Evangelist—is yet so full of wisdom and goodness, and so appropriate to some of the questions of our day, that we can as ill afford to lose it as any of those just quoted. It occurs as an interpolation in Luke vi. 4, and is as follows:—"On the same day he saw a certain man working on the Sabbath, and he said unto him, Man, if indeed thou knowest what thou doest, blessed art thou; but if thou knowest not, thou art cursed, and a transgressor of the law."

What shall we say of such sentences as these? They cannot surely be the invention of those who inserted them in the later MSS. There is something

about them which forbids us to question their authenticity, or to ascribe them to any one but Jesus Himself. On the other hand, the fact of their omission in the oldest copies seems to show that they did not form part of the original Gospels. They must belong to the same category with those "words of the Lord Jesus" which are preserved in the Acts of the Apostles,—“It is more blessed to give than to receive” (Acts xx. 35), and with those countless “things” that might have filled the “world itself,” the recollection of which, so many years after, at the close of a long life, forced St. John to speak of his own Gospel as a mere skeleton sketch of the life of his Master.

Certainly, if in many respects we have lost by the inaccurate and redundant edition of Erasmus and Stephens, in other respects we have gained; for a Testament without the story of the woman taken in adultery, and without the other gracious words just quoted, would be robbed of some of its most precious gems, even though it be the fact that those gems did not form a part of the Gospels as they left the hands of their authors.

The longest of the interpolations in the Gospels, and the only one which remains to be noticed, is the conclusion of St. Mark, in which the verses from verse 9 to the end of the chapter, though a very ancient addition, are not found in the oldest copies, and therefore cannot be accepted as from the hand of the Evangelist. But this passage is of a very different nature from those just noticed, and of secondary interest; and its loss would be of far less moment than theirs—since while in one portion it is a mere *résumé* of the narratives of the other Gospels, in another it breathes a far less Christian spirit than that which distinguishes them.

My examination, which I now bring to a conclusion, has been done only in the roughest and most imperfect manner, and must be taken as the work of a mere layman, anxious only to excite

others to acquaintance with that which he has himself found so attractive and useful. I have confined myself to the Gospels; but the Acts, Epistles, and Revelation, though perhaps less exquisitely interesting, will be found hardly less fruitful than the Gospels. And in the Gospels I have dealt with the redundances only. The questions of the age and authority of the three copies adduced are so fully and authoritatively treated in the clear and interesting preface which Professor Tischendorf has prefixed to the volume, as to render any further remarks on these heads unnecessary.

Any one who will take this Testament of Baron Tauchnitz's, and will mark out with a pencil the passages specified in the notes as omitted in the three MSS., or in two of them, will be astonished at the alterations in the face of those familiar pages. And if at first the phrases often seem balder and the sentences less fluent and abrupt than before, he will find these deficiencies made up for by greater life and greater reality, and will have the satisfaction of knowing that he has come much closer to the original condition of a document which all must desire to possess as nearly as possible in its original form, and has caught a trifle less faintly the echoes of that divine voice, for the tones of which men were never more eagerly listening than they are now.

The only suggestion that occurs to me for the improvement of this pretty little volume is that some means should be taken of showing in the verses themselves the alterations indicated in the notes. Without this it will never produce its full effect. But when so done—as one may try for himself with a pencil—the effect is most unexpected.

The redundances might be shown without difficulty, and the other kinds of alteration might be indicated, at least where they are of material importance.

G. GROVE.

M. ROUHER.

BY THE EDITOR.

It is impossible to read the French political news in any daily or weekly journal without constantly meeting with the name of Monsieur Rouher, who, during the twelve years preceding the recent downfall of "personal government," was "the Emperor's right hand," the most prominent and influential statesman in France who upheld the existing *régime*. The Duc de Morny, Marshal St. Arnaud, M. Walewski, Mocquard, Pelissier, all those who carried Louis Napoleon so brilliantly through the *coup d'état*, and afterward supported the Empire, have dropped off one after another, until M. Rouher is the only one now remaining of the famous men who assisted the President at that period.

For years past he has been the most brilliant defender of the Empire, almost the only one of the imperial orators able to hold his own against the attacks of Thiers, Ollivier, Favre, and the other members of the Left. But personal government in France is now at an end, ministers are to be responsible to the legislative bodies, and M. Rouher has been compelled to give way to a minister whose sentiments approximate more nearly to the liberal ideas of the Corps Législatif. His "resignation has been accepted," his portfolio withdrawn from him, and probably the last prominent political work of his life will be that which he is engaged in at present—carrying the new *Senatus Consultum* through the French Senate.

The career of this minister of Napoleon III. shows how success may often be ascribed to the unforeseen and trivial circumstances from which no one would have anticipated any result. M. Rouher was first known, and then became celebrated, by an incautious expression which escaped his lips in the heat of debate, and to which, in cooler blood, he in vain tried to restore its real meaning. His descendants should, out of gratitude, inscribe the word "catastrophe" on their coat of arms, for it was this word which changed the unknown advocate, the most obscure member of a

mediocre ministry, to his own surprise, into a great public celebrity.

Eugène Rouher, the Senator, Minister of State and of Finance, is now fifty-four years of age, and springs from a family, members of which for the last fifty years have held judicial offices. After finishing his studies at the college of his native town, Riom, he went to study law at Paris, became an advocate in 1837, and established himself as such in 1840 at Riom. The Department of Puy de Dôme, or Auvergne, as that part of the country was formerly called, has always been very monarchical and conservative, although, during the reign of Louis Philippe, the most violent opposition newspapers, supported by money from Paris, were published there. Consequently, actions against the press were quite the order of the day, and the Opposition, who were desirous of winning to their ranks the young and tolerably wealthy advocate, intrusted to him, directly after he had settled in the department, a large number of these cases to defend. As a barrister, he had not eloquence. He was not a ready speaker, was unacquainted with brilliant metaphors, and his variations on the word "liberty," then so much in fashion, showed the timid *dilettante*, rather than the skilled Professor, in these press prosecutions.

However, he was thoroughly successful. These trials brought his real judicial knowledge to light. He earned a great deal of money; and, in the year 1843, he married the daughter of the Mayor of Clermont, the chief town of the province, and through this marriage became a considerable landowner. Then he completely broke the loose bands which tied him to the liberal party; and in 1846 boldly came forward as government candidate, at the elections for the Chamber of Deputies, under the patronage of the minister, M. Guizot. But the bitter feeling against one who was considered to be a renegade was so great, that even many conservatives voted against him, and he obtained only a few thousand votes.

Under the Republic, with universal suffrage, he was more fortunate; 42,000 electors named him as deputy to the Constituent Assembly; and when this body had finished its labors, during which M. Rouher always voted with the right, 52,000 voters sent him to the Legislative Assembly.

The deputy of the Department of the Loire, Citizen Louis Napoleon Bonaparte, had once heard his young colleague, Rouher, speak in the Constituent Assembly, and when asked his opinion on the talents of the speaker, he replied, shaking his head: "It seems to me as if this citizen did not possess the capability of rightly expressing his own thoughts."

No one understood this oracular sentence: they turned away with a shrug from the deputy with the languid countenance, weary eyes, and world-renowned name. Six months after, M. Rouher was Minister of Justice. He had never exchanged a word with the then President of the Republic, and was utterly astonished when the President of the Council of Ministers, M. Ferdinand Barrot, informed him that it was the express wish of the first magistrate of the Republic that he should accept a portfolio. Till 1851 he remained under several ministries at the head of the department of Justice.

It was at this period that he let fall that celebrated word to which we have before alluded, and which made Rouher known from one end of France to the other. On the morning before one of those important sittings, which during the second Republic often became so stormy, Louis Napoleon said to Rouher—

"They wish again to try to extinguish you with the glorious Revolution of the 24th February, 1848. The people really believe that they were all Mirabeaus or Dantons! We must for once hold a mirror up before them, in which they may be able to see a faithful likeness of themselves in all their littleness!"

Rouher, meditating on these words of the President, went to the Assembly, and it so happened that immediately after his entrance he had to ascend the Tribune, to answer an interpellation as Minister of Justice.

"Be cautious—the chamber is very much excited to-day!" his colleague Baroche said to him.

"Certainly, certainly," he replied, rather absently, ascended the Tribune, and replied in a few impetuous words to the interpellation. The murmurs of the Assembly excited him still more; and when at last he heard the cry from the Left, "That was just what was said before the 24th February," his presence of mind completely forsook him, and, still under the impression which the words of the President of the Republic had made on him, he raised himself up to his full height and exclaimed with a voice of thunder—

"Your boasted Revolution was nothing more than a catastrophe!"

Only those who have been present at a French National Assembly can have the faintest idea of what now happened. Clapping, shrieking, hissing, threats and insults, followed without end! The tumult lasted for more than half an hour, and M. Rouher, who had retired to the ministers' bench, might well have feared for some minutes that his person was not secure from violent treatment.

In vain he explained, after quiet had in some measure been restored, that he had used the word "*catastrophe*" only in the sense of an unforeseen event. It was of no avail: amidst universal hissing "*l'homme à la catastrophe*" was again forced to leave the tribune.

Foreigners cannot understand the deep impression which such scenes make on the public in France. This innocent word flew like wildfire through the land, and became a sort of test by which some showed their hatred to the Republic, and others the most unbridled fury against the Government. And the man who had provoked this "*catastrophe*" in such an innocent manner, could scarcely believe his senses when he contemplated this terrible ferment; but he had an opportunity thereby, such as had never before been presented to him, of studying his countrymen. But he had not much time for this: a vote of want of confidence, a few weeks after, caused the fall of the entire ministry, and led to the *coup d'état*. Rouher remained in the chamber as a simple deputy, who could no longer speak, as the Left would not allow him to say a word, and always brought up afresh the recollection of the "*catastrophe*." At the consultations which preceded the execution of the

coup d'état at the Elysée, M. de Morny proposed the deputy Rouher as a minister. A dry "No" was the reply of the President, who gave as his reason the following words, which well characterized M. Rouher: "C'est l'homme des demi-mesures!"

The new order of things was, however, scarcely established, when the President, now unrestricted in his authority, offered M. Rouher a portfolio, which he accepted; but a few weeks after he retired, together with M. de Morny, as they refused to countersign the decree which confiscated a portion of the property of the Orleans family. How greatly this much-talked-of decree confused the minds of the most faithful and devoted adherents of Napoleon III. is proved from the simple fact that Morny, Napoleon's own brother, refused to sign it as minister. Time has cooled down this excitement, and it has been argued also that the word "confiscation" was falsely applied, as three courts of law confirmed that this property did not belong to the Orleans family, but to the State.

Napoleon gave the retiring minister the vice-presidency of the newly-created Council of State, and till 1855 he was almost forgotten, when the Emperor again called him into the ministry, and gave him the portfolio of Agriculture, Trade, and Public Works. Since that time—up to the present "catastrophe"—M. Rouher has never left the ministry; and in these twelve years has at different times presided over all the branches of the Government in France, with the exception of War and Marine.

The reader will remember that, after the Italian war, the Emperor, in the year 1859, thought the time had arrived in which a more liberal direction might be given to the Constitution. One of the chief measures taken in this sense was to appoint a minister whose duty it should be to defend the Government in the chambers. Billault was the first who held this difficult post; and after his death, in 1862, Rouher became his successor.

It was the general opinion that the Emperor had made a mistake in this appointment, as it was well remembered that Rouher's oratorical talents had not shone in the chambers of the Republic,

and his "catastrophe" speech was again brought up to the remembrance of the French nation. To succeed Billault, one of the best and most talented orators of France, was not an enviable inheritance for any man. But after his first speeches all saw how greatly they had been deceived. Often has M. Rouher, during the last five years, gained the victory over all opponents. Clever, undoubtedly, as a politician, we must not forget that, as a minister of Napoleon III., his opinions, whatever they may be, had to give way to those of his imperial master, whose will was supreme. Rouher, like all the other ministers, was only the executor of the Imperial will; but, as he was the only one in the whole Cabinet whose gift of eloquence could be employed with advantage in the chamber, a much more important place in the councils of the sovereign was assigned to him than to any of his colleagues.

In general, the sketch of those official speeches of which we have been speaking was drawn out for him by the Emperor's own hand. He works out the ideas, and then reads the whole to the Emperor; which, after it has been corrected, is communicated to the rest of the ministry. The morning before the sitting Rouher has another audience, when, often at the last moment, not unimportant changes are made. The really marvellous memory of Rouher has grown with all this mental exercise.

Rouher, in a word, was just the man whom Napoleon III. required—without ambition, without independence, and wonderfully endowed with talents and tact. To have discovered him out of the mass of parliamentary mediocrities, and to have made him pliable to his absolute and inflexible will, is the merit of the Emperor alone.

We must add to this sketch that the private life of Rouher, as well as his personal honor, have never in the remotest degree been subjected to the criticisms of the enemies of the empire, and that for the materials we have used in its preparation we are mainly indebted to the German Magazine *Daheim*, which has done so much toward disseminating among the people information concerning European celebrities.

POETRY.

A TRUE STORY.

SHE made a garden when she was young;
Her eyes were dazed by the sunrise glow—
Poor child! she thought she was wise and
strong,
She knew no better; 'twas long ago.

She planted her beds with seedling flowers,
She planted her lawn with yearling trees;
She built a trellis for woodbine bowers,
"How happy," she said, "shall I be with
these!"

How happy," she said, "shall I surely be
When my pansies and lilies and tulips blow!
I must wait for the cones on my cedar-tree,
For the noblest things take long to grow.

"'Tis easy to wait for a while," she said,
"The low little daisies will soon be here,
And my thicket will glow with roses red,
And my apple-tree bloom, in one more year."

So she waited, singing, as waits the bird
For his nestlings before their wings are
rown;
She waited, singing, tho' no one heard;
It was no sorrow to sing alone.

And the low little daisies starred the lawn,
But the pansies and lilies were slow to spring;
One tulip, streaked like a winter's dawn,
Just feebly opened to hear her sing.

"My pansies will come in June," she said,
"My lilies will come when the days are long,
But I fear my tulips must all be dead,
Save this poor blossom that loves my song."

So she waited, singing, as waits the bird
For his nestlings, after their wings are grown;
She waited, singing, tho' no one heard;
'Twas little pleasure to sing alone.

Only a pansy or two at last
Looked sadly up in her face and died;
Only one lily, when June was past,
Drooped dying by one dead tulip's side.

"Alas!" she said, and she sang no more,
"I never dreamed that it would be so;
I cannot sing, for my heart is sore,
Since seedling plants are not sure to grow.

"Yet wait," she said, "and in days to come
Roses will bloom on my thorny tree;
Under my limes will the wild bees hum,
And the shade of my cedar be fair to see."

She could not sing and she would not cry;
Silent and trusting she waited still;
The days and the months and the years went by,
And the winter frosts were strong to kill.

The garden she made when she was young
Was not a garden in after years;
This story had never been said or sung
If blossoms could thrive in a rain of tears;

This story had never been sung or said
If our seedling hopes were sure to grow—
She waited to see her cedar dead,
Then her hopeless tears got leave to flow.

She wept and wept by her thorny tree,
Nor one red rose for her weeping grew;
In her leafless limes, not one wild bee
Made one poor dream of her youth come true.

And yet she had planned her garden well,
Trusting the sun and the kindly rain;
So, when she saw how it all befell,
She never would hope or trust again.

She laid her head when her hair was gray
On the low little daisies that did not fail;
She had not a tear nor a word to say—
What could weeping and words avail?

This story had never been said or sung
If love were faithful, if hope were true;
We planted gardens when we were young;
The churchyard daisies were all that grew.

MARIA.

THE SUMMER POOL.

THERE is a singing in the summer air,
The blue and brown moths flutter o'er the grass,
The stubble bird is creaking in the wheat,
And perch'd upon the honeysuckle-hedge
Pipes the green linnet. O the golden world!
The stir of life on every blade of grass,
The motion and the joy on every bough,
The glad feast everywhere, for things that love
The sunshine, and for things that love the shade.

Aimlessly wandering with weary feet,
Watching the woolly clouds that wander by,
I come upon a lovely place of shade,
A still green pool, where with soft sound and stir
The shadows of o'er-hanging branches sleep,
Save where they leave one dreamy space of blue,
O'er whose soft stillness ever and anon
The feathery cirrus blows. Here unaware
I pause, and leaning on my staff I add
A shadow to the shadows; and behold!
Dim dreams steal down upon me, with a hum
Of little wings, a murmuring of boughs,
The dusky stir and motion dwelling here
Within the small green world. O'ershadowed
By dusky greenery, tho' all around
The sunshine throbs on fields of wheat and bean,
Downward I gaze into the dreamy blue,
And pass into a waking sleep, wherein
The green boughs rustle, feathery wreaths of
cloud

Pass softly, piloted by golden airs,
The air is still, no bird sings any more,
And, helpless as a tiny flying thing,
I am alone in all the world with God.

The wind dies—not a leaf stirs—in the pool
The fly scarce moves; earth seems to hold her
breath
Until her heart stops, listening silently
For the far footsteps of the coming Rain!

While thus I pause, it seems that I have gained
New eyes to see; my brain grows sensitive
To trivial things that, at another hour,
Had passed unheeded. Suddenly the air
Shivers, the shadows in whose midst I stand
Tremble and blacken;—the blue eye o' the pool
Is closed and clouded;—with a shrill sharp cry,
Oiling its wings, a swallow darteth past,
And weeding flowers beneath my feet thrust up
Their leaves to feel the coming shower. O hark!
The thirsty leaves are troubled into sighs,
And up above me, on the glistening boughs,
Patters the summer rain!

Into a nook,
Screen'd by thick foliage of oak and beech,
I crept for shelter; and the summer shower
Murmurs around me. In a dream I watch
And listen. O the sweetness of the sounds,
The pattering rain, the murmurous sigh of leaves,
The deep warm breathing of the scented air,
They sink into my soul—until at last
Comes the soft ceasing of the gentle fall,
And lo! the eye of blue within the pool
Opens again, while in a silvery gleam
The jewels twinkle moistly on the leaves,
Or, shaken downward by the summer wind,
Fall melting on the pool in rings of light!

LOST.

THE moon comes out and glimmers,
The stars like diamonds gleam,
And long green boughs are waving
O'er a pleasant mountain stream,

And my thoughts travel backwards,
Into the long dead years,
And your face comes before me,
Seen through a mist of tears.

We met—we loved—we parted:
The story ever new,
We lived—we hoped—we waited,
And so the long years grew.

A vast sea rolls between us,
A gulf that time has made,
New habits grow upon us,
Old beauties faint and fade.

Take one last look behind you,
Into the vale of years;
Does my face come before you,
Seen through a mist of tears?

L. C.

MADDALENA.

Dost thou not miss that pleasant interchange
Of thought and feeling, tastes and fancies bright,
Which from the varied world of books would
range
To our own hearts, thrilling with Love's first
light?
Then wouldst thou chide, if I one thought should
know
Unshared by thee, and if across my smile
Flittered a shade of care. With accents low
And tender, thou couldst instantly beguile
My sadness into joy, so true and deep
That I from very happiness would weep
At being loved by one so good and pure;
Yet would I rather all my grief endure
At having lost thee, than have never known
That heart, that soul, which once were all my
own.

RELICS.

[We think our readers will thank us for rescuing the following beautiful fragments from the oblivion to which the fastidious taste of Mr. Tennyson had consigned them. They are among the early poems rejected by him in bringing out his works in 1833.—EDITOR.]

SONNET.

"THERE are three things that fill my heart with
sighs
And steep my soul in laughter (when I view
Fair maiden forms moving like melodies)—
Dimples, rose-lips, and eyes of any hue.
There are three things beneath the blessed skies
For which I live—black eyes and brown and
blue:
I hold them all most dear; but, O black eyes!
I live and die and only die for you!
Of late such eyes looked at me—while I mused
At sunset underneath a shadowy plane
In old Bayona, nigh the southern sea—
From a half-open lattice looked at me,
I saw no more, only those eyes, confused
And dazzled to the heart with glorious pain."

[It seems a pity to have sacrificed so exquisite a description of the Death of a Lamb. No one but a true poet could have written it.]

"The lamb rejoiceth in the year,
And raceth freely with his fere,
And answers to his mother's calls
From the flowered furrow. In a time
Of which he wots not, run short pains
Through his warm heart; and then, from whence
He knows not, on his light there falls
A shadow; and his native slope,
Where he was wont to leap and climb,
Floats from his sick and filmed eyes,
And something in the darkness draws
His forehead earthward, and he dies."

A PRAYER.

SHE knelt by the crimson altar,
My darling, young and fair,
And the blue and gold in the martyr's robes,
Floated and shone in her hair;
Her voice, like the cry for mercy,
Which is raised to God in heaven,
For she prayed a prayer that the angels know
That sin may be forgiven!

And the light from the painted window
Lay on her like a glory,
As she knelt and prayed in the sun-lit aisle,
Like some sweet saint of story.
Oh, love, all love expelling,
'Tis so that sin relenteth,
For she knows the joy that the angels know,
When one lost soul repenteth.

"MOONLIGHT ON THE PRAIRIE."

SONNET.

THE moon, upon a halo-gilded throne,
Smiles in her palace, while the pearly hours,
Floating in brightness from celestial bowers,
Glide peacefully to slumber, one by one.
The Zephyr from its home of summer bloom,
Where dewy vales reflect enamored skies,
Wafts to my cheek delectable perfume—
Blossoms, with softly iridescent eyes,

In beauty sparkle on the sea of green,
That rolls its billows to the starlit shores
Of Night—How indescribable the scene!
My soul exalted adoration pours
To Him who shelters with his loving hand,
And scatters moonlight o'er this Prairie Land.

C. ERNST F.

SONNET.

BY PAUL H. HAYNE.

THIS eve along the calm resplendent west,
I marked a cloud alive with fairy light,
So warmly pure, so sweetly, richly bright,
It seemed a spirit of ether, floating blest,
In its own happy empire! While possessed
With admiration of the marvellous light,
Slowly its hues, opal and chrysolite,
Waned on the shadowy gloaming's phantom
breast:
The cloud became a terror, whose dark womb
Throbbled with keen lightnings, by destruction
hurled
Red bolt on bolt, while a drear ominous gloom
Enveloped Nature: o'er the startled world—
A deep alarm—burst the thunder boom,
And the swift Storm his coal black wings unfurled!

LITERARY NOTICES.

The Literature of the Age of Elizabeth. By EDWIN P. WHIPPLE. Boston: Fields, Osgood & Co.

THIS volume is much the most valuable recent contribution, we might say indeed one of the most valuable we have ever had, to that department of American literature in which it is most signally deficient, namely—literary criticism. Traversing the whole of that glorious period which has been well called the Golden Age of English literature, taking the numerous and diverse aspects under which human genius at that time seems to have displayed itself at its acme—poetry, drama, philosophy, theology—Mr. Whipple has given us the most comprehensive, luminous, and appreciative survey of the time and its works that has ever been collected in the compass of a single volume.

Hazlitt's essays and lectures will always claim the attention of the student; Mrs. Jameson, Hunt, and Schlegel will ever be read with delight; but Mr. Whipple has the advantage of familiarity with the labors of these and others in the same field, and brings to his work not only a thorough acquaintance with the subject, but much of the analytic subtlety of Hazlitt, the genial limpid sensibility of Mrs. Jameson, and at times the bewildering eloquence of Schlegel.

Mr. Whipple's style is, in itself, worthy of study by those who can appreciate literary art. Clear, vivid, and picturesque, glittering with antithesis and epigram, and again glowing with a perfect lava flood of thrilling spontaneous eloquence, there

is hardly another living writer who wields an instrument at once so keen and powerful. Indeed, in the author's previous works, the writing has been so fine as to have become a reproach, and he was said to be "all style and no stamina," caring too much for expression to be very solicitous about ideas, stringing together the conceits, fancies, and glittering phrases which he had skimmed from Carlyle, Macaulay, Arnold, and others.

If these strictures were just, and they doubtless were to a certain extent, they are not applicable to the present work. We believe there is not a volume of literary criticism in the language which displays more vigorous, analytic, and discriminative thought than "The Literature of the Age of Elizabeth," and there is certainly none which affords a clearer conception of one of the most critical periods in the history of intellectual development.

Mr. Whipple initiates his subject with some preliminary remarks upon the characteristics of Elizabethan literature, and then brings before us in succession Marlowe, Shakespeare, Ben Jonson, Middleton, Marston, Chapman, and other minor dramatists; Beaumont and Fletcher, Massinger, Ford, and Spenser, the minor Elizabethan poets; Sidney and Raleigh, Bacon and Hooker.

Of course the central figure is Shakespeare, and the two essays upon him, if not perfectly satisfactory, will probably be the most attractive of them all to the reader. We may remark of Mr. Whipple's criticism upon Shakespeare, that it is

negative rather than positive, exposing the absurdities of many of the stock ideas which have obtained concerning the great poet, rather than attempting to measure his "myriad-minded" genius.

No critic has ever approached the subject more reverently, or with a more pervading conviction of the utter inadequacy of the mind to "really receive the colossal conception of Shakespeare himself." As he finely says, "criticism upon Shakespeare is like coasting along a continent," and he only professes to treat desultorily of the salient topics which the theme presents.

And first of all he attacks with something of scorn the popular idea that Shakespeare was in himself a somewhat commonplace personage, who by some unexplained intellectual process blundered into the grandest monuments of human genius; a man lacking in individuality and great only in his works,—as Coleridge has it, "an omnipresent creativeness." "No king or queen of his time had so completely felt the cares and enjoyed the dignity of the regal state as this playwright, who usurped it by his thought alone; and the freshest and simplest maiden in Europe had no innocent heart experience which this man could not share—escaping in an instant from the hag-haunted imagination of Macbeth, in order to feel the tender flutter of her soul in his own. . . . He was on an excursion through the world of thought and action, to seize the essence of all the excitements of human nature,—terrible, painful, criminal, rapturous, humorous; and to do this in a short earthly career he was compelled to condense ages into days, and lives into minutes. He exhausts in a short time all the glory and all the agony there is on the throne or on the couch of Henry IV., and then, wearied with royalty, is off to the Boar's Head to have a rouse with Sir John. He feels all the flaming pride and scorn of the aristocrat Coriolanus; his brain widens with the imperial ideas, and his heart beats with the measureless ambition of the autocrat Caesar; and anon he has donned a greasy apron, plunged into the roaring Roman mob, and is yelling against aristocrat and autocrat with all the gusto of democratic rage. He is now a prattling child, and in a second he is the murderer with the knife at its throat. . . . Yet this indestructible spiritual energy, which becomes mightier with every exercise of might; which plucks out the heart and absorbs the vitality of everything it touches; which daringly commits itself to the fiercest, and joyously to the softest passions, without losing its moral and mental sanity; which in the most terrible excitements is as 'the blue dome of air' to the tempest that rages beneath it; which, aiming to include everything, refuses to be included by anything, and in the sweep of its creativeness acts with a confident audacity, as if in it nature were humanized and humanity individualized;—in short, this unexampled energy of blended sensibility, intelligence, and will is what constitutes the man Shakespeare; and this man is no mere name for an impersonal unconscious genius, that did its marvels by instinct, no name for a careless playwright who blundered into miracles, but is essentially a person, creating strictly within the limitations of his individuality,—within those limitations appearing to be impersonal only because he is comprehensive enough to cover a wide variety of special natures,—and, above all, a per-

son individually as great, at least, as the sum of his whole works."

Notwithstanding this testimony to Shakespeare's unexampled individual greatness, Mr. Whipple repudiates another of the popular proverbs, that his mind was universal, "wide as nature and human nature." He points out some directions which the poet's genius did not take, characters in which his sunny and genial nature could feel no sympathy. "And first, Shakespeare's religious instincts and sentiments were comparatively weak, for they were not creative. He has exercised his genius in the creation of no character in which religious sentiment or religious passion is dominant." Shakespeare in common with the other dramatists of his time saw nothing in the Puritans but objects of satire and contempt. "It may be doubted also if Shakespeare's affinities extended to those numerous classes of human character that stand for the reforming and philanthropic sentiments of humanity. We doubt if he was hopeful for the race. He was too profoundly impressed with its disturbing passions to have faith in its continuous progress. Though immensely greater than Bacon, it may be questioned if he could thoroughly have appreciated Bacon's intellectual character. He could have delineated him to perfection in everything but in that peculiar philanthropy of the mind, that spiritual benignity, that belief in man and confidence in his future, which both alone and account for so many of Bacon's moral defects. There is no character in his plays that covers the elements of such a man as Hildebrand or Luther, or either of the two Williams of Orange, or Hampden, or Howard, or Clarkson, or scores of other representative men whom history celebrates. Though the broadest individual nature which human nature has produced, human nature is immensely broader than he."

These are the most original and subtle points in the author's remarks on Shakespeare, but they are by no means all that is good in these two remarkable essays. He does not pretend to exhaust the subject; he does not even attempt to treat it in all its aspects, and above all he does not presume to pronounce in the superior *ex cathedra* style which is so offensive in the majority of Shakespearean critics. He says, with the "reverent humility" which he so much admires in Shakespeare himself: "The greatest and most interpretative minds which have made him (Shakespeare) their study, though they may have commenced with wielding the rod, soon found themselves seduced into taking seats on the benches, anxious to learn instead of impatient to teach; and have been compelled to admit that the poet who is the delight of the rudest urchin in the pit of the playhouse, is also the poet whose works defy the highest faculties of the philosopher thoroughly to comprehend."

We have dwelt thus long on Shakespeare, because he is the figure around which naturally clusters the interest of Elizabethan literature, not because he furnishes the theme for the best portion of Mr. Whipple's book. When writing of Shakespeare the author seems oppressed with the magnitude of the subject, but when he gets on lower ground he shows more self-confidence. The essay on "rare Ben Jonson" is thorough and acute, and is pervaded throughout with a rich and breezy humor. So also on Spenser and the Minor Poets,

on Sidney and Raleigh. But the papers on Bacon are the best in the volume. His character, the influences by which he was surrounded, his works, and the relation in which he stands to modern Inductive Philosophy, are analyzed in a most able and comprehensive manner—better than in any other treatise we have seen. No one can read these papers without having a truer and juster conception of Bacon's character, of what he did, and what he failed to do.

Mr. Whipple rejects utterly the insolent flippant epigram about Bacon being "at once the wisest and the meanest of mankind," and shows that the traditional defects of the man were due to the vast comprehensiveness of his mental grasp, to the absence of prejudices and passion—those conservators of morals—to his conviction that the magnitude of his ends would justify almost any means adopted for their attainment, and to one of those tragic verdicts of history by which, in this case, Essex, who betrayed his benefactors, is held up to admiration, and Bacon, who adopted the only reasonable course open to him, is condemned as a treacherous ingrate. Bacon's virtues were undoubtedly his own; his faults were due in great part to the times in which he lived. The accusation on which he was condemned—that of accepting bribes for judicial decisions—was by no means unusual under James I., and in the case of Bacon seems to resolve itself into this, that he accepted the money offered him for corruption and then decided according to law.

Mr. Whipple's estimate of Bacon's philosophical position will probably be new to many who have regarded him as in fact the father of modern scientific methods,—it was so to us,—but it will doubtless be acquiesced in by scientific men, and will be the final verdict of history. He shows that Bacon's method has in truth never been followed, that it was disproved even by contemporaries, and that no discovery in science has ever been made by the twenty-seven Tables of Prerogative Instances. That a fatal objection to it is that it is an invention of a single human genius which would have rendered all subsequent genius or originality not only unnecessary, but impossible. The reason why Bacon was chosen as the father and representative of Inductive Philosophy, or, in other words, of Modern Science, was that it was found convenient to adopt "one whose name lends to it so much literary prestige, and who was undoubtedly one of the broadest, richest, and most imperial of human intellects, if he was not one of the most scientific."

We have said enough to show the scope and dignity of Mr. Whipple's criticism; but, in order to illustrate the solicitude for justice and the mental conscientiousness which he brings to his work, we will conclude our review with the concluding paragraph of the essays. Passing rapidly in review the writers whom he had discussed, and referring particularly to those on whom his strictures are severe, he says: "As we more or less roughly handled these, as we felt the pulse of life throbbing in every dust-covered volume,—dust out of which man was originally made, and to which man, as an author, is commonly so sure to return,—the books resumed their original form of man, became personal forces, to resent impeachments of their honor, or misconceptions of their genius; and a troop of spirits stalked from the neglected

pages to confront their irreverent critic. There they were,—ominous or contemptuous judges of the person who assumed to be their judge: on the face of some sarcastic denial; on others, tender reproaches; on others, benevolent pity; on others, serenely beautiful indifference or disdain. 'Who taught you,' their looks seemed to say, 'to deliver dogmatic judgments on us? What know you of our birth, culture, passions, temptations, struggles, motives, two hundred years ago? What right have you to blame? What qualifications have you to praise? Let us abide in our earthly oblivion,—in our immortal life. It is sufficient that our works demonstrated on earth the inextinguishable vitality of the soul that glowed within us; and, for the rest, we have long passed to the only infallible—the Almighty—critic and judge of works and of men!'"

The Man who Laughs. By VICTOR HUGO. New York: D. Appleton & Co.

"THE MAN WHO LAUGHS" has been pretty generally reviewed both in this country and in England, and has met with almost equally general condemnation. Mr. Swinburne, indeed, in a thrilling poetic rhapsody on Victor Hugo's genius, has deprecated any formal criticism whatever upon such a writer and such a work, and has more than hinted that whoever ventures upon it is one of Charles Reade's "anonymuncles who go scribbling about." He says that such a work is to be read, "not by the lamp-light of realism, but by the sun-light of his (the author's) imagination reflected upon our own;" in other words, that every genius must be a law unto itself. And this is undoubtedly to some extent true; but if it is unqualifiedly so, if a man by possession of genius is put entirely beyond the pale of analysis and discussion, then any such thing as a "police of letters" is impossible; and it is precisely this assumption that criticism has always had to combat. The concession, too, of the assumption would do nothing toward simplifying the inevitable difficulties, for who is to decide precisely what degree of genius is requisite to justify a man in denying the competency of any tribunal, and what man or men possess that degree?

If it be conceded that the eloquence of Ruskin is superior to the broken exclamatory language of a Choctaw; if it be conceded that in professing to write an historical work, truth to history, if not in details, at least in the spirit of the times, is better than demonstrable absurdities; and if, again, it be conceded that regard should be paid to the possibilities of time, place, and race, and if these principles are invariable, then we have at least some canons of criticism which are as elementary as any other intellectual laws, which are as applicable to Victor Hugo as to the smallest "anonymuncle" of the press.

Having thus endeavored to establish a base to stand upon, let us proceed to the examination of "The Man who Laughs."

Of course no one at this day would deny the splendor of Victor Hugo's dramatic, poetic, and constructive genius, his profound reverence for the true and the beautiful, and hatred of wrong and oppression, the breadth and intensity of his sympathies, and his supreme mastery of language. These indeed are before the world as

facts above the province of inquiry or criticism. He has written books which are deeds, and which will be among the proudest legacies which our age will hand down to posterity; and in anything that we may say we wish it to be taken with this qualification.

In the present work the author gives us the first of a series on *Aristocracy*, *Monarchy*, and *Ninety-three*; and, as "the English patriciate is the patriciate in the precise meaning of the word," he lays the scene of his work on *Aristocracy*, in England, at the beginning of the eighteenth century, during the reign of Anne. It is thus professedly historical, and in order to show us "the very age and body of the time," detail is accumulated upon detail; heraldry, genealogy, and ceremonials are searched with the patience of a compiler; laws are sifted, and social customs pictured, until, despite the numerous mistakes, it is painful to contemplate the amount of research it must all have cost. And yet, if Mr. Dixon had taken Generals Butler and Winder, the New York legislature, and our city councils, our brutal prize-fights, and the laws which in some States sanction the beating of women, Mormonism, and Shakerism, and held them up to the world as the normal product of our civilization, he would probably have been as near the truth of history as is M. Hugo's conception of England in Anne's time. Dukes, duchesses, and ladies go to prize-fights where one of the combatants is knocked dead and carried off in a wheelbarrow, all being *en règle*; young lords, being challenged, choose, one the mace and dagger; another the duel with two knives, body to body, stripped from the waist up; and a third boxing; the hero, restored to his barony, makes a speech in the House of Lords, such as Bright would not dare deliver in the Commons to-day, and a scene ensues which beggars Donnybrook Fair.

In fact, the whole drama and personages are viewed through the eyes of a Frenchman, and a Frenchman, too, who has lived amid all the conflicting intellectual and political movements of the nineteenth century, who looks upon the relations of people and aristocracy as we do to-day, and who ignores the difference with which such a question was regarded a hundred and fifty years ago.

We have probably said enough to show that in its historic aspects "The Man who Laughs" cannot but be regarded as a failure, but in these aspects alone. As a grandly dramatic, poetic, and philosophical picture of human life, or rather of individual lives, it is not unworthy of Victor Hugo's genius. Though unequal and turgid in parts, and though the worst faults of the author—his jerky, ragged, exclamatory style—is exaggerated to such a degree as to make "The Travellers of the Sea" seem smooth reading, yet the grandeur and beauty of thought and the magnificence of imagery cannot be disguised even in a translation, and are altogether unequalled by any other modern writer. To those who would realize how by mere power of language a horrible charm can be thrown around things which are loathsome and repulsive in themselves, and an awful moral significance attached to them, we would recommend the magnificent overture called "Sea and Night," especially the descriptions of the storm

and foundering at sea, and the struggle of the galleys corpse with ravens at midnight amid the howling of winds and tempest. We cannot recall anything equal to them, even in the author's previous writings.

"The Man who Laughs" is in its essence a magnificent, fervent appeal for the people against oppression; and those who have read *Les Misérables* need not be told with what power Victor Hugo treats of social wrongs. The sharp contrasts between poverty and luxury, suffering and festivity, starvation and the palace, are sketched with the old dramatic vigor; and the characters introduced, though eminently un-English, have a far wider human significance—that of elemental social forces. The queen and nobles on one side, on the other Gwynplaine, the man with a perpetual laugh stamped upon his features by a surgical operation performed in infancy, typical of the people, who amid all their sufferings must carry a smiling countenance. Josiane the Flesh, and Barkilphedro the Devil, who belong to no nation and no clime, but unhappily are among the possibilities of human nature everywhere. Ursus, "The Philosopher," as he called himself, the gruff, blustering, cynical, but tender and affectionate old mountebank who took in the children Gwynplaine and Dea when they were abandoned, and spurned by the world. And Dea! how shall we speak of her whose life is written "as if in star-fire and immortal tears?" She was a seraph that had wandered out of bounds and yet breathed on earth the air of Paradise; and, blind herself, she came upon the humble scene, like a vision of the morning, or like a "dream of sleeping music." Like "little Nell," she was already "less of earth than heaven," and we feel from the first that the final tragedy must come. But she is not lost to us, she cannot be lost to us;—we shall see her again when we hear the "sobbing of the litanies," when the sound of music is borne upon the breeze, when we breathe the perfume of flowers, and when Nature is at her prayers beneath the evening stars.

It is enough for one human genius to have created such a character, and to have depicted such a death. There is nothing in all our literature to compare to her, save Ophelia, and Miranda, and the Pompilia of Mr. Browning's last poem.

As our notice is, so is the book. Rambling, jumbled, and confused; luminous with conceptions almost divine, disfigured with others which are neither man nor woman, brute nor human. A book much worse than Victor Hugo ought to have written, but such as only he could have written.

The Vagabonds, and other Poems. By J. T. TROWBRIDGE. Boston: Fields, Osgood & Co.

MR. TROWBRIDGE has very little of the "divine afflatus" of the poet, and not much of the simplicity and ease which, despite their quaintness and archaisms, characterize the old balladists; but he has written several very excellent ballads which are doubtless familiar enough to all readers of periodical literature. "The Vagabonds," which gives the title to this volume, and which is probably the best poem in the collection, has been read in every school-room, literary society, and

rostrum in the Eastern States; and in it the author has at once marked the field and the limitations of his poetic faculty—its characteristics are the characteristics of everything he has written. The same mingling of sentiment and pathos, and attaching of moral significance to obvious facts and experiences, the quick, ebullient fancy, swift to perceive analogies and to draw them, which have made "The Vagabonds" so popular, and given them a place in our literature, will be found in all his pieces which rise above the level of magazine poetry. It is this capacity for detecting analogies which is at once the merit and the defect of Mr. Trowbridge's poetic faculty—it gives to his verses their wit, grace, and brilliancy; and enables him to handle his rhymes with remarkable ease and dexterity; but when he attempts to trace the hidden in the obvious, to find moral coincidences in the outward aspect of things, he becomes didactic, and didactic to a degree which would have driven Edgar Poe and his school of critics mad. Several of the best poems in the collection, such as the "Frozen Harbor," and "By the River," are deformed by vague "applications," which are usually uncalled for by the subject, and which are markedly inferior to the poems themselves. Longfellow, in his "Besieged City," has given us the one example in our language of absolute success in this class of poetry, but the very perfection of that beautiful poem should warn all lesser writers away from the ground.

Mr. Trowbridge is not always guilty of this, but he perpetrates it so often that we come to have an uncomfortable feeling that if it is not there the poem is unfinished, or the last verses left out.

Of the other poems in the volume, the apostrophe to "Beauty," "Our Lady," "The Restored Picture," "La Cantatrice," "The Wolves," and "Strawberries," are the best.

"Beauty" is genuine and ardent, written in the "fine frenzy" of true inspiration, and reminds us of James Russell Lowell.

The inevitable "Lyrics of the War" are part of the ephemeral literature of the recent struggle, and, with the exception of the "Sword of Bolivar," which is not a war lyric, should have been left in the oblivion which they had no doubt obtained. It is astonishing that with all the tremendous events and splendid inspirations of our civil war, only five or six poems really worthy of the subject should have been produced; but the more of these lyrics we read, the more we are convinced that whatever impulse it may have given the intellect of the country, it certainly failed to reach the poets. Mr. Trowbridge's, however, is not the genius to "sing of arms and of men," and of human passions.

"Darius Green and his Flying-Machine" is written with all the broad and liberal humor of Dr. Holmes, and had we seen it in a magazine, we should, undoubtedly, have given him the credit for it. The remainder of the "lighter pieces" are devoted principally to pastoral themes, and as in all the poems in which Mr. Trowbridge is content to use his really excellent descriptive talent, they are picturesque, suggestive, and pleasing.

The book is neat and handsome, and embellished with a portrait of the author, whose face shows him to be what we have described—a man

of wit and sensibility, quick in his perceptions, given to reflection rather than action, and saddened by too much pondering on the pathos of human life.

The Intelligence of Animals. From the French of ERNEST MENAULT. New York: Scribner & Co.

THIS is No. IV. of the "Illustrated Library of Wonders," the merits and objects of which we have discussed at length in a previous number. The series will probably contain from thirty to fifty volumes, and as each volume traverses a special field of natural history, the whole will present a comprehensive range of scientific information in a popular, untechnical, and easily intelligible shape.

The object of the present volume is sufficiently indicated by the title. M. Menault endeavors to explain in a popular manner the reasons and experiments which have led the best modern exponents of natural history to repudiate the old theory of mere "unreasoning instinct," and to assign to the lower orders of animals an intelligence differing only in degree from that of man. In order to do this he has condensed the latest testimony of the best authorities concerning the animal kingdom, commencing with the ant, the only example we have of a true Platonian Republic, and ending with the *quadrumana*, or monkeys; then arrative being composed principally of anecdotes, with some of which we have all been familiar from childhood, while others are new and sufficiently startling.

The theory expounded in M. Menault's work is by no means new, though it will doubtless prove so to many who here meet with its scientific discussion for the first time. It is now almost universally conceded by those whose views are entitled to the highest respect upon this matter, that we must either so extend the meaning of the word instinct as practically to include a large majority of the human race, or else we must concede to the whole animal kingdom, from the highest to the lowest, an intelligence capable of drawing deductions from observed facts, of adapting itself to unforeseen circumstances, and susceptible of being improved by cultivation—in fact, the reasoning faculties of man. There is no other alternative, and whether we adopt the one or the other, it necessitates the abandonment of the old idea, the fallacy of which even Buffon could not help perpetually exposing, of mere mechanical instinct.

We forbear from entering into the philosophical results of this theory, for there is not a sentence in M. Menault's work of a speculative or controversial tendency, and in his preface he distinctly declines to give in his adhesion to "the development theory." But we may mention that it utterly annihilates the principal and most popular objection to Darwin's theory. If the intelligence of man differs from that of the lower animals in degree only, and not in kind, the development of the human race from pre-existing races is not on its face the impossibility which it has been popularly held to be. The possession by man of what we call "moral ideas" cannot be advanced authoritatively as an argument, for according to the philosophy of the Utilitarian school, which certainly has the allegiance of a large majority of thinking men, moral systems and moral ideas are but the result of experience, and experience is merely the record of reasoning faculties which we possess in

common with other animals, however infinite may be the degree of difference.

"The Intelligence of Animals" is illustrated with fifty-seven woodcuts, many of which are poor enough, but the style is, on the whole, neat and cheap. We should be glad to see this series in every Sunday-school library in the country, for there, more than elsewhere, they will be accessible to children; and while the works are singularly free from objectionable teachings, they will place before those whose interest it is most desirable to awaken, a wider range of popular scientific knowledge than could ever be obtained by them before.

In Silk Attire. A Novel. By WILLIAM BLACK. New York: Harper & Brothers.

"In Silk Attire" is a sensational novel, not exactly as Charles Reade's novels are sensational—credible, practical, and realistic—but altogether above the average level of contemporary fiction.

The story is commonplace enough, the best of taste is not always exhibited, and Mr. Black seems to lack constructive talent and the highest power of expression; but he is an artist and a man of imagination, and it is only on a closely critical survey of his work that its deficiencies are noticeable. It tells of love and of passion, and it treats of them with the warmth and fervor of a vivid and rather sensuous imagination, but it leaves no vague rebellious questionings, no passionate revolt against established moral systems, and none of the morbid discontent with the realities of life which are the unfortunate effects of so large a portion of modern sensational fiction. In a word, it is stimulative but healthful.

The heroine of the story is an actress, and the psychological problem which the author works out is the impossibility of acting truly and grandly in the "counterfeit presentations" of the stage when once the great drama of individual personal life has commenced. To act greatly is to feel deeply, but to feel outside of ourselves, to project ourselves wholly into an intellectual conception, and, above all, utterly to ignore our own individuality, in so far as it separates us from the simulated character. To do this "the abyssal depths of personality" must have remained untouched, and individual life must be in abeyance. The moment those grand absorbing passions which lie buried in our bosoms are stirred, self-consciousness intervenes, and acting as an inspiration, and not merely as an art, is necessarily at an end.

Mr. Black has worked out his story with skill, and with a subtle insight into human character. His women especially are typical, personal, and, what is not usually the case, possible.

Harper's Edition of George Eliot's Novels. New York: Harper & Brothers.

Messrs. HARPER & BROTHERS do not seem at all intimidated by the vigor which Fields, Osgood & Co. have exhibited in the "publishers' war" recently commenced between the two houses, and the struggle continues without abatement. They are now following up the household edition of George Eliot's novels with a new edition of their own, in 12mo, cloth, which they are selling at a price which cannot possibly pay for the binding. We spoke last month of the household edition published by Fields, Osgood & Co. The Harper's

edition has the advantage of illustrations, larger type, and lower price.

It seems a pity that such a contest should be carried on between two of our largest and most respectable publishing houses; but while the gods war we mortals may live, and the public is certainly the only one to whom any benefits can accrue from it.

BOOKS RECEIVED.

The Mill on the Floss. By GEORGE ELIOT. Household edition. Boston: Fields, Osgood & Co. 1 vol. 16mo, cloth, pp. 315.

Henry Esmond, and Lovel the Widower. By WM. M. THACKERAY. New York: Harper & Bros. 1 vol. 8vo, paper, pp. 233.

Countess Gisela. By E. MARLITT. Translated by A. NAHMER. New York: Harper & Bros. 1 vol. 8vo, paper, pp. 125.

Romola. By GEORGE ELIOT. Household edition. Boston: Fields, Osgood & Co. 1 vol. 16mo, pp. 344.

Sermons. By Rev. STOPFORD A. BROOKE. Boston: Fields, Osgood & Co. 1 vol. 12mo, pp. 323.

A Compendious German Grammar. By W. D. WHITNEY. New York: Leypoldt & Holt. 1 vol. 12mo, cloth, pp. 248.

Felix Holt, the Radical. By GEORGE ELIOT. Household edition. Boston: Fields, Osgood & Co. 1 vol. 16mo, pp. 278.

Veronique. A Romance. By FLORENCE MARYATT. Boston: Loring. 1 vol. 8vo, paper, pp. 200.

Found Dead. By the Author of "Carlyon's Year," "Lost Sir Massingberd," &c. New York: Harper & Bros. 1 vol. 8vo, paper, pp. 110.

Zell's Encyclopedia. Semi-monthly parts. Nos. 10 and 11. Philadelphia: T. Ellwood Zell. Large quarto, pp. 40.

Too Bright to Last. A Novel. Boston: Fields, Osgood & Co. 1 vol. 8vo, paper, pp. 60.

SCIENCE.

A "Mysterious Something."—But do the laws of chemical affinity, to which, as I have endeavored to infer, living beings, whether vegetable or animal, are in absolute subjection, together with those of capillary attraction, of diffusion, and so forth, account for the formation of an organic structure, as distinguished from the elaboration of the chemical substances of which it is composed? No more, it seems to me, than the laws of motion account for the union, of oxygen and hydrogen to form water, though the ponderable matter so uniting is subject to the laws of motion during the act of union, just as well as before and after. In the various processes of crystallization, of precipitation, and so forth, which we witness in dead matter, I cannot see the faintest shadow of an approach to the formation of an organic structure, still less to the wonderful series of changes which are concerned in the growth and perpetuation of even the lowliest plant. Admitting to the full as highly probable, though not completely demonstrated, the applicability to living beings of the laws

which have been ascertained with reference to dead matter, I feel constrained, at the same time, to admit the existence of a mysterious *something* lying beyond—a *something out generis*, which I regard, not as balancing and suspending the ordinary physical laws, but as working with them and through them to the attainment of a designed end. What this *something* which we call life may be is a profound mystery. We know not how many links in the chain of secondary causation may yet remain behind; we know not how few. It would be presumptuous indeed to assume in any case that we had already reached the last link, and to charge with irreverence a fellow-worker who attempted to push his investigations yet one step further back. On the other hand, if a thick darkness enshrouds all beyond, we have no right to assume it to be impossible that we should have reached even the last link of the chain, a stage where further progress is unattainable; and we can only refer the highest law at which we stopped to the fiat of an Almighty Power. To assume the contrary as a matter of necessity is, practically, to remove the First Cause of all to an infinite distance from us. The boundary, however, between what is clearly known and what is veiled in impenetrable darkness is not ordinarily thus sharply defined. Between the two there lies a misty region, in which loom the ill-discerned forms of links of the chain which are yet beyond us. But the general principle is not affected thereby. Let us fearlessly trace the dependence of link on link as far as it may be given us to trace it, but let us take heed that in thus studying second causes we forget not the First Cause, nor shut our eyes to the wonderful proofs of design which, in the study of organized beings especially, meet us at every turn.—*Professor Stokes' Address to the British Association.*

Influence of Meteors on Health.—Here is a subject for medical philosophers and those fond of abstruse questions. In an article on "The August Meteors" in our contemporary the *Spectator*, the possible influence of meteoric matter on the animal life of the earth is touched upon. Professor Herschel has succeeded in examining and analyzing, by means of the spectroscope, the light of seventeen of these bodies; and he has detected the well-known yellow bands produced by sodium in combustion. It is strange to consider what becomes of all the sodium thus dispersed throughout the upper regions of the air, as there can be no doubt that, in some form or other—mixed or in combination—it reaches the earth. The very air we breathe must at all times contain, according to our contemporary, in however minute a proportion, the cosmical dust thus brought to us from out the interplanetary spaces. As the different meteoric systems are differently constituted, the air we breathe is continually being impregnated with various forms of metallic dust. It is not certain that deleterious results do not occasionally flow from an overdose of some of the elements contained in meteors. As far as facts and dates are concerned, it might be plausibly maintained that a meteoric system has brought plague and pestilence with it. The "sweating sickness" has been associated (though not very satisfactorily, it must be allowed) with the thirty-

third year return of great displays of November stars. A notion has even been entertained that the destruction of Sodom and Gomorrah was brought about by an unusually heavy downfall of sodium-laden meteors. Speculations and hypotheses of this kind, no doubt, make up some interesting reading; but they are, it appears to us, quite barren of all utility. We need not go to interplanetary spaces as the source of sodium compounds in the atmosphere. The spray of every wave that dashes itself against a rock, or becomes beaten into surf, causes the dissipation of a certain amount of salt into the atmosphere; and Professor Roscoe goes so far as to conjecture that the soda, which all accustomed to work at all with the spectroscope know to be present everywhere, may, by its antiseptic properties, exert a considerable influence in maintaining the public health. The invigorating and beneficial effects of sea breezes may be due to the large amount of soda, in a minute subdivision, which they contain. When invalids go to the seaside—which, indeed, all the world seems bent on doing just now—they little think that they are possibly being cured in more senses than one.—*The Lancet.*

Science and Arts.—The meeting of the *Royal Agricultural Society* at Manchester, besides showing improvements in live stock and farm and dairy produce, made clear to all beholders that the application of machinery to agriculture has become more and more practicable. There were nearly eight thousand machines and implements exhibited, and this fact alone implies a large and lively demand. Among them were horse pitchforks, which, by a combination of poles, ropes, and pulleys, will fork hay or barley from a wagon to the top of the tallest rick with surprising rapidity. Ploughs are now made to effect eight furrows at once by the aid of a steam-engine; and steam-cultivators loosen at once breadths of from nine feet to eighteen feet, and work to a depth of six inches. No wonder that the number of those enterprising persons increases who undertake to plough farms in any part of the country by contract. Another contrivance lays down iron shoes as a sort of endless rail, under the wheels of carts on soft roads; and thus another farming difficulty is overcome. And hard roads are not neglected, for a fifteen ton roller has been constructed which bites up the surface of an old road, and presses down solidly a layer of new macadam at the rate of half an acre in ten hours, and at a cost of a farthing a square yard (superficial). We hear that the Manchester meeting was unprecedentedly successful, and it seems to have deserved success.

What is Light?—The present state of optical science is such as to furnish us with evidence, of a force which is perfectly overwhelming, that light consists of a tremor or vibratory movement propagated in an elastic medium filling the planetary and stellar spaces, a medium which thus fulfils for light an office similar to that of air for sound. In this theory, to difference of periodic time corresponds difference of refrangibility. Suppose that we were in possession of a source of light capable, like the bell in the analogous case of sound, of exciting in the ether supposed at rest vibrations of a definite period, corresponding, therefore, to light of a

definite refrangibility; then, just as in the case of sound, if the source of light and the observer were receding from or approaching to each other with a velocity which was not insensibly small compared with the velocity of light, an appreciable lowering or elevation of refrangibility would be produced, which would be capable of detection by means of a spectroscope of high dispersive power. The velocity of light is so enormous, about 185,000 miles per second, that it can readily be imagined that any motion which we can experimentally produce in a source of light is as rest in comparison. But the earth in its orbit round the sun moves at the rate of about eighteen miles per second; and in the motions of stars approaching to or receding from our sun we might expect to meet with velocities comparable with this. The orbital velocity of the earth is, it is true, only about the one ten-thousandth part of the velocity of light. Still, the effect of such a velocity on the refrangibility of light, which admits of being easily calculated, proves not to be so insensibly small as to elude all chance of detection, provided only the observations are conducted with extreme delicacy.—*Professor Stoke's Address to the British Association.*

Tuu Corona.—Some time in the earlier half of last year an obscure star in the constellation of the Northern Crown, which had hitherto been barely noticed by the astronomers, was observed suddenly to blaze up till it almost equalled the lustre of a star of the first magnitude. A similar phenomenon had been known to occur more than once before, but then for the first time science was possessed of appliances which enabled it to determine the cause. It was discovered by the help of the spectroscope that the sudden increase of brilliance was due to a conflagration of hydrogen, and it was calculated that this increase of light implied an increase of heat given off which would raise by seven hundred and eighty times the temperature of any bodies that might be within the range of its influence. That the fixed stars have planetary systems dependent upon them is nothing more than a probable conjecture; but it is tolerably certain that our sun in his constitution, &c., resembles the stars. And further, it has been observed by the same wonderful instrumentality of the spectroscope that there do take place in him burnings of hydrogen similar in kind to the tremendous conflagration which seems to have occurred in *Corona*. What effect upon our world such a conflagration in the sun—obviously not an impossible event—would have may be very easily understood. Everything would be instantaneously turned into vapor. The philosophers are kind enough to say that such a catastrophe is not likely to happen, but they would themselves allow that they have no data by which to calculate the probability.

Singular Occurrence.—A strange geological phenomenon caused some excitement last week at Murat, a village situated between the valley of Mont Dore and that of St. James. A civil engineer had caused a rectangular well to be sunk to a depth of 53 metres through a stratum of hard tufa, which covers the primitive formation in that district. At this depth, which is insignificant compared to the shaft of a mine, the heat, nevertheless, became so intense that the workmen had to be relieved at short intervals.

Their wooden shoes soon got intolerably warm, and they could not lie down to rest themselves on the hot ground. On the other hand, the appearance of the tufa denoted that the well had nearly reached the granite. The engineer, on leaving the spot for a while, had recommended his men to be very careful during his absence, and to content themselves with removing the rubble, without going further down. One of them, however, in throwing the last shovelful into the skip, took it into his head to remove with his pickaxe a piece of tufa, about 30 inches in circumference; but no sooner had he done this than he saw the bottom of the hole he had made swell up. At the same time a loud rumbling noise was heard. The men, in a fright, jumped into the cage and called to be pulled up, but they had barely got to the height of a dozen metres when a thick column of hot water, preceded by a violent report, rose up in the air, projecting huge stones upwards. The water in falling scalded the men grievously. The jet diminished, and the well filled rapidly, the poor fellows succeeding, however, in getting out in time. In the course of ten hours the well got quite full, and from that time a rivulet of thermal water has been flowing from the spot into the Dordogne. The liquid on arriving there still retains a temperature of 40 deg. centigrade. Upon analysis it has been found to contain upwards of twenty milligrammes (nearly half a grain) of arseniate of potash per litre, a proportion unheard of before. The Minister of Public Works has sent a commission of engineers to the spot for further investigation.

Dr. Ginsburg's Discoveries.—Dr. Ginsburg, who has been searching the great continental libraries, has found, and with immense labor copied, several valuable Masoretic MSS., especially at Hallé, where he lit upon an "Ochla vi Ochla," a Masora, commencing with those words, which he has good reason to believe once belonged to Elias Levita, a famous Talmudist of the 9th century, and which was avowedly incorporated with the more recent Masoras to which reference is generally made. It may suffice to explain for the unlearned reader that a Masora is a sort of complicated concordance of the Hebrew Scriptures, with critical notes upon almost every word and letter, fixing their pronunciation, force, and meaning. He has already, with great labor, copied several of the principal MSS., and is about to resume his researches in Spain, Palestine, and perhaps in St. Petersburg.—*English Independent*

ART.

In the whole course of art history no country exemplifies more clearly than Holland the law that schools of painting, sculpture, and architecture respond to the physical geography of a country and to the character of the race who inhabit it. In this sense the arts of Holland are emphatically national. The pictures of Rembrandt and Vander Helst, of Teniers, Jan Steen, Ostade, Gerard Douw, Metz, and Mieris, involve that strict relation of cause and effect which we are accustomed to look for

only within the limits of the inductive sciences. The conditions under which Dutch art has come into the world are well defined, and the quality of the art accords with those conditions. "Granted the existence of a democratic form of government, a people addicted to commerce and agriculture, a nation dwelling in lowlands bordering on the sea, trading towns ruled by well-to-do burgomasters; religious communities who do not ask of the arts aids to devotion, who do not call for the intervention of saint or angel, who do not require that a picture shall give imaginative warmth to worship or permit that the work of man's hands shall come between God and the conscience; and we almost of necessity find just that style of art which now meets the traveller at every turn in the midst of the plain, picturesque, and plodding people of Holland. The Dutch painted no jewelled crown, no regal throne or sceptre; theirs was an art for a commercial commonwealth. Rembrandt, born in a mill, looked upon nature from beneath a deep shadow; the light on his canvas was a flash in darkness; he etched his father's windmill, he painted that grand portrait of his friend, Burgomaster Six, which abides in the family house at Amsterdam even to this day. In like manner Teniers and Ostade gathered materials which lay at their own doors; they walked into the streets and sketched the peasant seated on a bench, the tinker mending a kettle, the boor carousing away his senses over a pot of beer; such scenes as we have recently witnessed in the fair of Rotterdam. In Holland, in fact, at every step we meet with some such picture as we have been but just before admiring in the Gallery of Amsterdam or of the Hague. Compositions like those of Paul Potter abound. As soon as the towns are left for the country we come upon cows in meadows, ruminating beneath the pollard willow. We walk towards the coast and discover how the painters of a former day frequented the Zuyder Zee to watch the coasting craft becalmed, or beating against the breeze into shelter. Here silvery mists rise from the tranquil horizon as in the calm, gray distance of Vander Velde; the sails lie idle waiting for a wind. In Holland nature is sombre and shadowy, the meadow green, the sky gray, the sea silvery as the sun shines among the vapors. Shadows too lie in the towns among the narrow streets overhung with gables. For the golden sun of the south enters not these northern latitudes, neither does the broad swell of the Atlantic sweep into the narrow and chopping seas. And such as are these aspects of nature, such has been the phase of Dutch art, and such does its character continue even to the present day. A land which has never been known to rise into a mountain, a people guilty of a revolution about once in two centuries, is not likely to break out into heroics, or to indulge largely in the drama of historic art.—*Saturday Review*.

A correspondent of the *French Journal Officiel* writes as follows: "About forty years ago, when a large house in Constantinople had sunk beneath the level of the soil, an immense series of subterranean vaults was discovered, supported by magnificent marble pillars, which, judging by their rich decorations, were the work of Greek artists. Underneath the walls is a lake of unknown extent, and of considerable depth. This mysterious construction, of which history makes no mention, is

supposed to extend under a considerable part of the city. The principal entrance, being the only one accessible to visitors, is situated in the courtyard of a private palace, the proprietor of which has a boat in which he amuses himself sailing about within a hundred yards of the entrance. Last month an Englishman, accompanied by a sailor, desired to explore the lake thoroughly: having obtained the necessary permission, he set forth on his adventurous journey, but never returned, he and the sailor having been asphyxiated beyond the reach of help. Another Englishman volunteered to go alone in search of them in another boat with six torches attached to it; for a long time the reflection of the torches upon the waters was visible to the onlookers at the entrance, until it was lost in the gloom and darkness. After an absence of two hours he returned from his unsuccessful search completely exhausted, and nearly choked with the foul air he had inhaled, having in his whole course seen the ranges of vaults and pillars uniformly continued. The Turkish authorities have ordered the boat to be lifted, and prohibited parties from sailing on the lake, but still permit the curious to inspect this singular construction at the entrance, which reminds the beholder of the architectural wonders of ancient Egypt."

Cav. Salazaro has recently discovered, in the Church of St. Michele di Capua, a crypt belonging to the epoch of the Longobards, with paintings of the tenth century in an excellent state of preservation. In the centre of the cupoletta is a fresco of Christ in the act of giving his benediction, similar to what may generally be seen in the basilicas of Rome. In the centre is a column of oriental granite of great beauty; it is veined with red, and the capital of the column bears the distinguished characteristics of the age of the Longobardi. Signor Salazaro has also discovered, at Calvi, a large grotto containing from forty to forty-five frescoes of the tenth, eleventh, and twelfth centuries. In the crypt is a rather remarkable painting of St. Peter holding in his hands the "keys of heaven," crossed in such a manner as to make a perfect monogram of his name—Petrus.

An important discovery has been made at Pompeii. A painting has been found in a chamber adjoining the one which was opened at the time of the Princess Margherita's excursion. The picture represents the circus, such as it existed not long before the eruption, and is the first of this kind which has been brought to light, as the Romans ordinarily selected mythological, rural, or purely ideal subjects. The representation shows that the amphitheatre was planted with trees. Near the circus is to be seen a large edifice, of which, hitherto, not the slightest indication existed. Commander Fiorelli is said to intend searching for this building, so as to complete the knowledge already possessed of the buried city. The painting has been detached from the wall, on which it was executed, and will be removed to the museum at Naples, in order to be protected from the action of the atmosphere.

The hollow originally dividing the two summits of the Palatine Hill, in Rome, was discovered three or four years ago in the process of excavations which are still going on. It appears that the Emperors filled it up for the extension of their palaces,

using the buildings which stood in their way as substructions. Some of the latter have at last been unearthed, and their walls are found to be rich in fresco paintings by Grecian artists. Opposite the main entrance of the principal house there is a representation of a street, the houses being carefully represented, and a few figures. This is the first picture of a Roman street which has ever been found. The French painter, Leroux, is making an exact copy of the fresco, before the colors shall have faded by exposure to the air.

A beautiful bronze, recently discovered at Foggia, in Italy, has been purchased by the British Museum. Its subject is a naked boy at play. His little body is all life and excitement; he lifts up two fingers of his left hand, while the outspread right is concealed behind his back. The game he is engaged in is played in Italy to this day.

The age of the statue is a matter of conjecture, but the most favored notion is, that the work is of the Macedonian period. It is in an almost perfect state of preservation, and of a size very unusual in antiques of this character.

The Royal Academy of London reduced the price of admission during the latter part of the season to sixpence, in order to encourage the interest of the working-classes.

The project utterly failed, however, to attract any larger number; the British workingmen, unlike their neighbors the French, not being yet sufficiently cultivated to feel any enthusiasm for art. The movement, nevertheless, is in the right direction, and low prices will eventually attract the attention of the masses and develop the lacking taste.

We have already spoken of the reforms which were made last spring in the management of the National Academy of Design. The new system, however, does not go into operation until next year; and the coming fall and winter exhibition will be under the auspices of the old organization. It is to be hoped that the unmistakable expression of public opinion, which the late discussion evoked, will be sufficient to warn the various committees against the most flagrant abuses complained of.

The international exhibition at Munich, of which we spoke last month, is now open. Berlin sends 200 pictures; Vienna, 200; Paris, 120; Italy, 140; Belgium, 60; and England, 12. The United States sends 61. The contributions from France and Belgium are said to have been very carefully selected, and the impression they make is correspondingly favorable. There were upwards of 300 pieces of sculpture contributed, a much larger number than was anticipated.

A mosaic of Sir Joshua Reynolds, life size, has been sent from Vienna to the South Kensington Museum, England. The great English painter is represented standing in an easy attitude, a palette on the table beside him, in his right hand a brush, with which he is in the act of mixing the colors. In his left hand is a book, on which may be read the title of his "Discourses."

A portion of the funds for the great cathedral of Cologne is obtained by means of a lottery. Up to the present time 750,000 thalers have been obtained from this source, of which sum 366,000 thalers still remain unexpended. Since the body of the

cathedral has been finished, the work is now concentrated upon the towers, which are to reach a height of 500 feet.

It is stated that Albert Dürer's picture, "The Death of the Virgin," which had disappeared for so long a period, and had been so long looked for in vain, is now to be seen above the high altar in St. Wolfgang's Church (on Lake Wolfgang, in Upper Austria), where it is exciting great admiration.

Gustave Doré and Blanchard Jerrold have been making a systematic exploration of London—from Wapping to Kensington, among high and low—with the view to a great work on the great capital. M. Doré has made a most interesting collection of studies.

During the time the Œcumenical Council is sitting in Rome, an exhibition of oil paintings by old masters will be held. Those only will be admitted which treat on subjects founded on Biblical history, and portraits of dignitaries of the Catholic Church.

John Ruskin has been elected to the newly-created chair, the Slade Art Professorship, at Oxford. This is a fitting tribute to the most eminent art critic that England ever produced. There were nine other competitors for the position.

M. Dutuit, of Rouen, is the possessor of a collection of engravings valued at \$160,000. An exquisite etching by Rembrandt, among the number, is valued at \$5,000.

Leigh Hunt's bust, executed by Mr. Durham, will be placed over his tomb in Kensall Green Cemetery, on October 19—the eighty-fifth anniversary of his birth.

In excavating at Pompeii, a fresco painting has been found representing the circus as it was before the great eruption. Close to it is a large building, no traces of which have been ever recognized, but which the Commandatore Fiorelli is now engaged in seeking.

VARIETIES.

How Queen Victoria Heard of her Accession to the Throne.—The Archbishop of Canterbury and the Lord Chamberlain went to the Princess Victoria at Kensington Palace to inform her of King William's death. They reached Kensington Palace at about five in the morning; they knocked, they rang, they thumped for a considerable time before they could rouse the porter at the gate; they were again kept waiting in the courtyard, then turned into one of the lower rooms, where they seemed forgotten by everybody. They rang the bell, and desired that the attendant of the Princess Victoria might be sent to inform her Royal Highness that they requested an audience on business of importance. After another delay, and another ringing to inquire the cause, the attendant was summoned, who stated that the Princess was in such a sweet sleep she could not venture to disturb her. Then they said, "We are come to the Queen, on business of State, and even her sleep must give way to that!" It did; and to prove that she did not keep them waiting, in a few minutes she came into the

room in a loose white nightgown and shawl, her nightcap thrown off, and her hair falling upon her shoulders, her feet in slippers, tears in her eyes, but perfectly collected and dignified.

Proposed Intersection of Ireland by a Ship Canal.—It is proposed to cut a canal, navigable for the largest class of American and other vessels, between Galway and Dublin. Some Liverpool men are actively canvassing in favor of the scheme, and it is stated, so well approved is it by Americans that the necessary capital could all be raised in the United States. The distance between the two ports is about 100 miles, the ground flat, and it is understood that no engineering difficulties of moment are in the way, while a large amount of time would be saved and danger and shipwreck avoided. The scheme embraces a fleet of steamers for towing purposes.

A Lady's Trip across Mont Cenis.—A lady writes as follows to the *Record*:—"Leaving Geneva at 6 30 a. m., we reached St. Michael at 3 40 p. m., and changed into the Fell railway. Of all the wonderful things we ever did see, that railway beats all. The engine is small and light, with a very little boiler, shaped like a grand piano; then there is a space of daylight, with a rod or two, and seeming to be scarcely connected with the underworks. These are a wonderfully heavy and involved mass of wheels—three pairs perpendicular, two pairs horizontal, and the edges of these last are concave, to clasp the middle rail, which is raised about a foot above the ground, and by means of which the engine goes clawing itself uphill. The train was small, consisting of only four carriages in all, viz., engine, luggage-van, and two long carriages, saloon-shaped like a Manchester omnibus, entering at each end, where stood a guard working very strong brakes. Then off you go. The rails are laid on one side of the ordinary road, along which the diligence is going with one passenger and luggage. The train makes the most extraordinary movements. You are whisked sharply from side to side, and, short as it is, this train is sometimes curved so much that if you look out at the window you see the engine close before you nearly broadside. Sometimes, when it is very steep, you feel the engine pulling you on by short sharp tugs, and when they stop, which they do frequently for coal and water, the guards all clap on their brakes vigorously, as the train begins instantly to run back a little, and that feeling is not pleasant. Often you run along, seeing nothing under you but an awful chasm 500 or 600 feet below. We saw the Great Tunnel about half a mile on our right. This railway will not go through it, but quite another line is being made. There was a huge building near, from which a great pipe went into the mouth of the tunnel to supply the workmen with air. Towards the summit began endless wooden galleries, like tunnels, covering the line from the risk of avalanches and drifts, for although it was a perfectly calm day below, the wind here blew furiously. The moon rose almost full, and when, nearly at the top, the train rushed into the open air, the view of the white expanse and the awful crags all round was something most—I can't say what. Every one sat on the arm of their compartment, and no one spoke a word. The average depth of snow was two feet, but oh, the tremen-

dous drifts! The houses of refuge here come every quarter of a mile—a sort of lodge, with a light in each. The sensation when we reached the top and began to descend, was very curious. You could not mistake the very moment when your carriage crossed the line. The ascent had occupied four hours and a half, but we went down at a tremendous pace in one hour and a half, with all the brakes on. If it were not for that centre rail, which secures your safety, I can't imagine any one daring to go by these trains."

A great commotion reigned, a few weeks ago, at the famous Bonaparte Lyceum in Paris. It has upward of one thousand pupils, mostly the sons of the wealthiest citizens of Paris. A collection is taken up annually at the Lyceum, for the benefit of the so-called Prince Imperial Charities. This year the pupils manifested their hostility to the young Prince and the whole dynasty, by refusing to give a single sou for the purpose; but, in order not to appear heartless, they immediately organized an independent subscription for the poor, and drew up a manifesto, stating their disgust at the attempts constantly made by the Government to connect the name of the Prince with everything relating to the youths of France, and calling upon their brethren in the other schools of Paris to collect money likewise for the poor, but not to allow the Prince Imperial's name to be used in connection with it. The Government heard of the affair, and the Rector of the Lyceum was ordered to reprimand the students severely. When he did so, he was hissed by the boys, who shouted also: "Down with the Prince Imperial!"

A lecture has been given by Mr. W. H. Perkin, at the Royal Institution, on "*The Newest Coloring Matters.*" Among the many interesting facts then put forward was the discovery of a beautiful blue color, by a German chemist, on treating rosaniline with sulphuric acid. Unfortunately, it was not a "fast color." A dyer made many trials therewith, in the hope of turning it to account, but all in vain. He happened to mention his difficulty to a photographer, who, knowing that hyposulphite of sodium would fix a photograph, recommended the dyer to try that. The trial was made; when mixed with the hyposulphite the blue became a beautiful green, and, better still, a "fast color." This was the origin of that brilliant dye commonly known as "night green," because of its remaining unmistakably green in appearance when seen by artificial light. Let it be remembered that nearly all the new colors are extracted in some way from coal-tar, that the first was discovered not more than thirteen years ago, and that the annual value now manufactured is £1,250,000, and it will be seen that in the industry created by these new products there is an admirable example of the results of scientific investigation. The best of it is that the field is inexhaustible: for many years to come it will yield a rich harvest of discoveries.

Gold has been brought from San Francisco to London in twenty days, which may be taken as a proof that the great railway all across America is in working order. Of course, if metal can travel so quickly, passengers can, and we may perhaps see some curious results of a sudden influx of a

new population into new localities. What will become of characteristics of race when large intermixture has taken place? Early ethnological history abounds, as is well known, with accounts of multitudinous migrations from the East, and it seems as if history were about to repeat itself, for the Chinese and Japanese are swarming into California in greater numbers than ever. From 2,300 in 1866 the tale rose to 10,000 in 1868, and that it will be largely increased in the present year may be regarded as certain, seeing that these oriental laborers are in demand not only in the Pacific States, but are to be introduced into the Atlantic States between the Potomac and Mississippi. It is found that as laborers on railways and on farms, the Chinese are more trustworthy than American (which includes Irish) laborers. Hitherto the arrivals of Chinese women have been but scanty; but on one day in June last, 1,250 were landed at San Francisco. Are the yellow race going to supersede the Blacks and the Irish in the struggle for existence; and will they in time exert a modifying influence on the Anglo-Saxon race among whom they dwell? We may anticipate that these and other questions will one day occupy the attention of the American Ethnological Society.

Justly Ungrateful.—Says a writer in Blackwood, "I remember a cruel old schoolmaster of mine, who always accompanied his fagellations with the assurance we'd bless him yet for this scourging, and that the time would come when we'd thank him on our knees for these wholesome floggings; but after a long lapse of years I have felt no gratitude, nor ever met a school-fellow who did."

Female Education.—Mr. John Stuart Mill has written to some ladies at St. Petersburg, who are organizing a scheme for the higher education of women in Russia. Mr. Mill says:—"I have learnt with pleasure, mingled with admiration, that there are found in Russia women sufficiently enlightened and courageous to demand for their sex a participation in the various branches of higher historical, philological, and scientific education, including the practical art of medicine, and to gain for this cause important support from the scientific world. That is what the most enlightened persons are asking, without having yet attained it, in the other countries of Europe. Thanks to you, mesdames, Russia is perhaps about to surpass them in speed; it would be a proof that civilizations relatively recent sometimes accept before the older civilizations great ideas of amelioration. The equal advent of both sexes to intellectual culture is important not only to women, which is assuredly a sufficient recommendation, but also to universal civilization. I am profoundly convinced that the moral and intellectual progress of the male sex runs a great risk of stopping, if not of receding, as long as that of the women remains behind, and that, not only because nothing can replace the mother for the education of children, but also because the influence upon man himself of the character and the ideas of the companion of his life cannot be insignificant; woman must either push him forward or hold him back."

When Professor Aytoun was making proposals for marriage to his first wife, a daughter of the celebrated Professor Wilson, the lady reminded him that it would be necessary to ask the approval of her sire.—"Certainly," said Aytoun; "but I am a little diffident in speaking to him, pray go and tell him my proposals yourself." The lady proceeded to the library, and taking her father affectionately by the hand, mentioned that Professor Aytoun had asked her to become his wife. She added, "Shall I accept his offer, papa? He says he is too diffident to name the subject to you himself."—"Then," said old Christopher, "I had better write my reply, and pin it to your back." He did so, and the lady returned to the drawing-room. There the anxious suitor read the answer to his message, which was in these words, "With the author's compliments."

A Kingdom to Let.—Anybody want a kingdom all for himself, twice as big as the Isle of Wight, with hills as high as Skiddaw, timber, fresh-water streams, beautiful climate, varying only from 38 deg. to 78 deg., and a soil that will grow anything? The *Telegraph* of Friday says there is such a kingdom to let, to be had of the British Government for a moderate rent. It is the island of Auckland, 180 miles south of New Zealand, with no natives, and belonging to the Colonial-office, which some years ago leased it to Messrs. Enderby, who leased it again to a company. The latter failed to pay the rent, and Government accordingly took possession again. No further assignment has been made, and if anybody wants to be a sort of king, and can get forty or fifty laborers together, Lord Granville will, we doubt not, make him Lessee, Governor, and Parliament all together. He ought to be rich enough to keep a steam yacht though, or he will be rather more secluded than if he kept a pike. If adventure is not wholly dead among us, that island will be taken up this year.—*Spectator*.

A Khamsin in the Desert.—Our route was brought to a standstill, for the sand was whirled up into the air in masses, more like a wall than anything else I can compare it to. The appearance of the desert looked as billowy as an angry sea. Then we passed through deep furrows of burning sand, gathered, as it were, up in masses like the furious waves of a most tempestuous ocean, and thus we pursued our path, like skilful swimmers buoy themselves over mighty billows, through the scorching crests of those sandy hillocks. Notwithstanding the precaution which we had all taken to keep our mouths covered, we breathed almost as much sand as air; our tongues clove to our palates; our eyes became haggard and bloodshot, and our respiration became as heated as if we had burned our throats, which greatly increased our sufferings. Still on we went, without feeling certain of our whereabouts, for the atmosphere had become intensely dark, and the clouds of hot sand in which we were enveloped kept gradually becoming denser. The whole of that scorching, sandy waste appeared to heave, swell, and smoke like the eruption of Mount Vesuvius prior to the bursting forth of a volcano. Our throats were parched with an insatiable maddening thirst—a thirst that seemed to make one's blood boil again; even

the appearance of that lurid horizon fascinated the sight like a basilisk, and over and anon, like that deceitful mirage, conjured up before our eyes bright clear lakes, fertile islands, shady trees, dripping fountains, umbrageous shelter, and flowing waters.—*The Grand Pacha's Cruise on the Nile.*

Robinson Crusoe's Island Colonized.—The following bit of information will be of interest the world over:—At a distance of less than a three days' voyage from Valparaiso, in Chili, and nearly in the same latitude with this important port on the western coast of South America, is the island of Juan Fernandez, where once upon a time Alexander Selkirk, during a solitary banishment of four years, gathered the material for Defoe's "Robinson Crusoe." This island, little thought of by the inhabitants of the Chilean coastland, has lately become of some interest by the fact that in December, 1868, it was ceded to a society of Germans under the guidance of Robert Wehrdan, an engineer from Saxony, Germany, for the purpose of colonization. The *entrepreneur* of this expedition, Robert Wehrdan, left Germany eleven years since, passed several years in England, served as major through the war of the republic against secession, and was subsequently engaged as engineer with the Ceropasco Rail, in South America. He and his society, about sixty or seventy individuals, have taken possession of the island, which is described as being a most fertile and lovely spot. They found there countless herds of goats, some thirty half-wild horses, and sixty donkeys—the latter animals proving to be exceedingly shy. They brought with them cows and other cattle, swine, numerous fowls, and all the various kinds of agricultural implements, with boats and fishing apparatus, to engage in different pursuits and occupations. The grotto, made famous as Robinson's abode, situated in a spacious valley, covered with large fields of wild turnips—a desirable food for swine—has been assigned to the hopeful young Chilean gentleman to whom the care of the porcine part of the society's stock has been intrusted, and he and his *protégés* are doing very well in their new quarters. Juan Fernandez is one of the stations where whaling vessels take in water and wood.—*San Francisco News.*

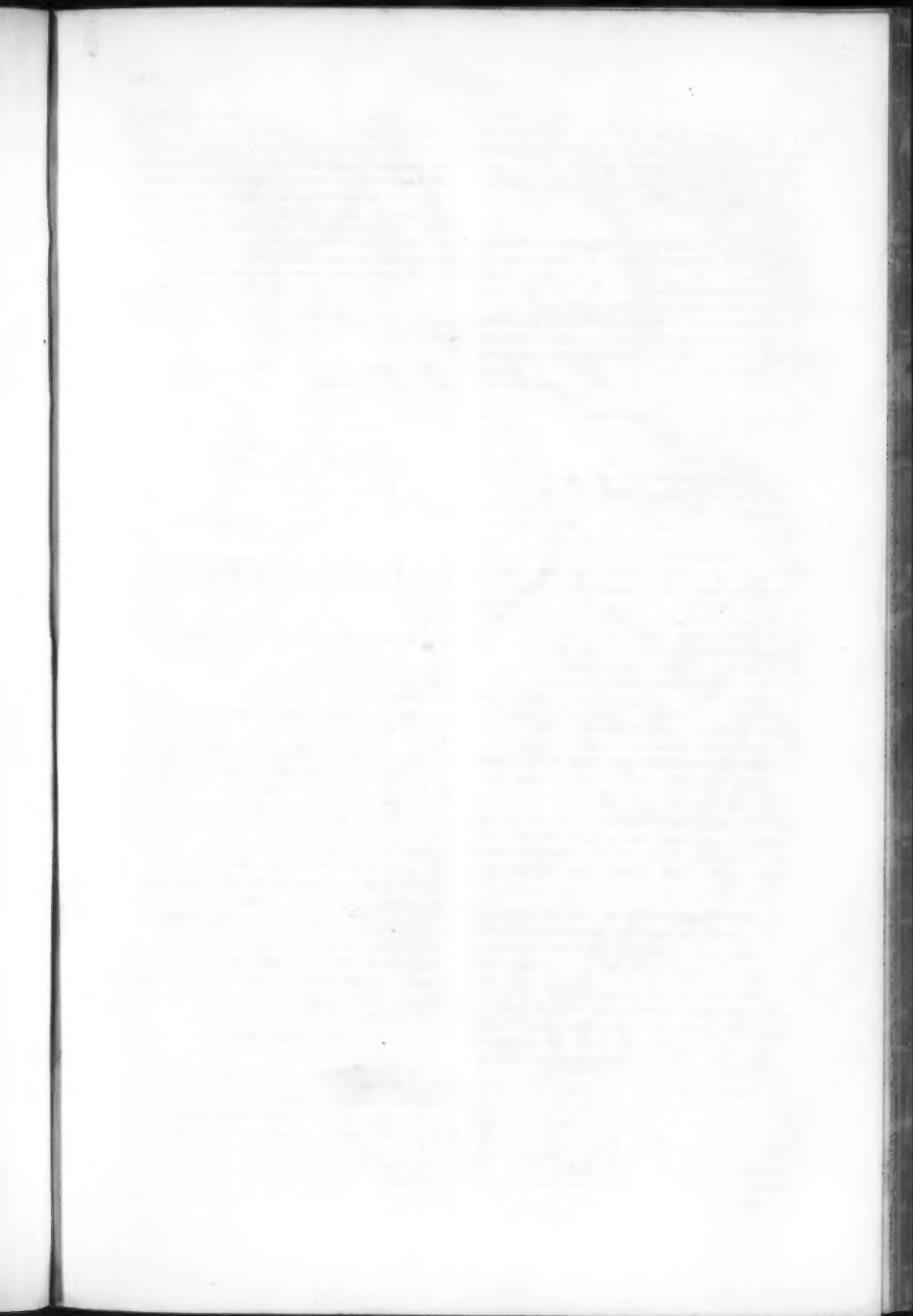
England's Decadence.—If war is to be made by money and machinery, the nation which is the largest and most covetous multitude will win. You may be as scientific as you choose; the mob that can pay more for sulphuric acid and gunpowder will at last poison its bullets, throw acid in your faces, and make an end of you; of itself also in good time, but of you first. And to the English people the choice of its fate is very near now. It may spasmodically defend its property with iron walls a fathom thick, a few years longer—a very few. No walls will defend either it, or its havings, against the multitude that is breeding and spreading, faster than the clouds, over the habitable earth. We shall be allowed to live by small pedler's business and ironmongery—since we have chosen those for our line of life—as long as we are found useful black servants to the Americans; and are content to dig coals, and sit in the cinders; and have

still coals to dig—they once exhausted, or got cheaper elsewhere, we shall be abolished. But if we think more wisely while there is yet time, and set our minds again on multiplying Englishmen, and not on cheapening English wares; if we resolve to submit to wholesome laws of labor and economy, and, setting our political squabbles aside, try how many strong creatures, friendly and faithful to each other, we can crowd into every spot of English dominion, neither poison nor iron will prevail against us; nor traffic, nor hatred: the noble nation will yet, by the grace of Heaven, rule over the ignoble, and force of heart hold its own against fire-balls.—*The Queen of the Air.* By John Ruskin, LL.D.

Mr. Ruskin on "The Higher Alps."—The following are the closing sentences of the preface to Mr. Ruskin's new book, "The Queen of the Air; being a Study of the Greek Myths of Cloud and Storm:"—"This first day of May, 1869, I am writing where my work was begun thirty-five years ago—within sight of the snows of the higher Alps. In that half of the permitted life of man, I have seen strange evil brought upon every scene that I had best loved, or tried to make beloved by others. The light which once flushed those pale summits with its rose at dawn, and purple at sunset, is now umbered and faint; the air which once lulaid the clefts of all their golden crags with azure is now defiled with languid coils of smoke, belched from worse than volcanic fires; their very glacier waves are ebbing, and their snows fading as if hell had breathed on them; the waters that once sank at their feet into crystalline rest are now dimmed and foul, from deep to deep, and shore to shore. These are no careless words—they are accurately, horribly true. I know what the Swiss lakes were; no pool of Alpine fountain at its source was clearer. This morning, on the lake of Geneva, at half a mile from the beach, I could scarcely see my ear-blade a fathom deep. The light, the air, the waters, all defiled! How of the earth itself? Take this one fact for type of honor done by the modern Swiss to the earth of his native land. There used to be a little rock at the end of the avenue, by the port of Neuchatel. There is the last marble of the foot of Jura, sloping to the blue water, and (at this time of year) covered with bright pink tufts of *Saponaria*. I went three days since to gather a blossom at the place. The goodly native rock and its flowers were covered with the dust and refuse of the town; but in the middle of the avenue was a newly-constructed artificial rockery, with a fountain twisted through a spinning spout, and an inscription on one of its loose tumbled stones:

'Aux Botanistes.
Le club Juraïque.'

Ah, masters of modern science, give me back my Athens out of your phials, and seal, if it may be, once more, Asmodeus therein. You have divided the elements, and united them, and discerned them in the stars. Teach us now but this of them, which is all that man need know, that the Air is given to him for his life, and the rain to his thirst and for his baptism, and the Fire for his warmth, and the Sun for sight, and the Earth for his meat—and his rest."





Engraved for the Eclectic by Geo E. Perine N.Y.

N. EUGENE ROUHER.

